

Curriculum Vitae

Latifur R. Khan

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EDUCATION

- Ph.D. in Computer Science, *University of Southern California (USC)*, USA August 2000
Dissertation: Ontology-based Information Selection.
- M.S. in Computer Science, *University of Southern California (USC)*, USA December 1996.
- B.S. in Computer Science and Engineering, *Bangladesh University of Engineering and Technology*, November 1993 (First Class with Honors—Second position).

WORK EXPERIENCE

- Professor: Computer Science Dept., The University of Texas at Dallas (UTD), since September 2012.
- Associate Professor: Computer Science Dept., The University of Texas at Dallas (UTD), September 2006 – August 2012.
- Assistant Professor: Computer Science Dept., The University of Texas at Dallas, September 2000 – August 2006.
- Graduate Research Assistant: Integrated Media Systems Center, USC, September, 1997 – August, 2000, and Information Sciences Institute (ISI), USC, September 1995 – August 1997.
- Lecturer: Computer Science & Engineering, Bangladesh University of Engineering and Technology, December 1993 – August 1995.

SERVICE TO THE PROFESSION:

- **Associate Editor** of *IEEE Transactions on Knowledge & Data Engineering (TKDE)*, IEEE Computer Society (2011-2015).
- **Associate Editor** of *International Journal of Data Mining, Modeling and Management (IJDMMM)*, Inderscience Publishers, Switzerland, since 2008.
- **Associate Editor** of *International Journal of Security Informatics*, Springer ISSN: 2190-8532, Journal no. 13388, since Spring 2011.
- **Associate Editor** of *Journal of Advanced Computing and Applications*, USM, Malaysia, since July 2010.
- **Associate Editor** of *Computer Standards and Interface Journal* by Elsevier Publishing, 2006 – 2009.
- Guest Editor of *International Journal of Knowledge and Information Systems (KAIS)*, Vol. 10, No. 2, Springer (2006).

- Guest Editor of *International Journal of Multimedia Tools and Applications*, Springer.
- Member of *IEEE Kanai Award Committee*, 2005 and 2006.

SHORT PROFESSIONAL NARRATIVE

Dr. Latifur Khan is currently a *Professor* in the *Computer Science* department at the *University of Texas, Dallas* where he has been teaching and conducting research since September, 2000. He received his *Ph.D. and M.S.* degrees in *Computer Science* from the *University of Southern California (USC)*, in August of 2000, and December of 1996 respectively. He is currently supported by grants from *Sandia Lab (via DOE), NSF, and the Air Force Office of Scientific Research*. In addition, he is the director of *DML@UTD, UTD Big Data Analytics and Management Laboratory*.

Dr. Khan's research emphasizes several broad areas including *big data analytics and management, data mining, complex data management including semantic web, and geospatial data and cyber security*. At UT Dallas he has introduced and taught a new regular lecture oriented course, "Big Data Management and Analytics." This is a popular class and students receive hands-on experience driven by Dr. Khan's research in "Big data management" and "Big data analytics" areas.

Dr. Khan applies his "Big data analytics" research in data mining, and cybersecurity areas. With regard to *data mining*, Dr. Khan is researching *supervised learning algorithms* to classify evolving data streams. Data streams are continuous flows of data. Examples of data streams include network traffic, sensor data, call center records and so on. Their sheer volume and speed pose a great challenge for the data mining community to mine them. Dr Khan's research group has presented a novel class detection technique that automatically detects novel classes in data streams by analyzing and quantifying the clustering properties. Traditional stream data mining approaches to these problems have difficulty incorporating relational domain knowledge and feature relationships which can be used to improve the accuracy of a classifier. Dr. Khan group models large data streams using a Markov Logic Network to capture relational features in structured data and shows that this approach performs better for supervised learning than current state-of-the-art approaches. Additionally, they evaluate their approach with semi-supervised learning scenarios, where class labels are only partially available during training.

Anomaly detection refers to the identification of patterns in a dataset that do not conform to expected patterns. Such non-conformant patterns typically correspond to samples of interest and are assigned different labels in different domains, such as outliers, anomalies, exceptions, malware, etc. A daunting challenge is to detect anomalies in rapid, voluminous streams of data. Dr. Khan has developed a novel, generic real-time anomaly detection framework for multi-source stream data using distributed streaming frameworks such as Spark and Storm, and demonstrated that Spark processes a tuple much quicker than Storm on average.

With regard to cyber-security, Dr. Khan and Dr. Lin focus on mobile system malware detection with smart phone malware as an example. In particular, they have designed and developed solutions for behavior-based intrusion detection/mitigation for mobile smart phones. To facilitate reverse engineering in behavior-based malware detection systems they consider the Android system and the accomplishments include the following tasks. They first investigate an attack involving covert communication between two Android apps on a smartphone. Second, they present their research for apps to detect GPS spoofing by users which involve behavioral and semantic analysis. Finally, they describe a defense mechanism to detect SSL/TLS vulnerabilities in Android apps.

Dr. Khan's group has developed "Big data management" techniques to manage complex data including semantic web (RDF triples) and geo-spatial. In particular, his group has developed scalable distributed framework using *Apache Spark*, *MongoDB*, *Stanford CoreNLP*, and *PETRARCH* to extract useful metadata from Political event data.

Dr. Latifur Khan has published over 200 papers in premier journals such as *VLDB*, *Journal of Web Semantics*, *IEEE TDKE*, *IEEE TDSC*, *IEEE TSMC*, and *AI Research* and in prestigious conferences such as *AAAI*, *IJCAI*, *ACM CIKM*, *GIS*, *IEEE ICDM*, *ECML/PKDD*, *PAKDD*, *ACM Multimedia*, *ICDE*, *ACM WWW*, *ICWC*, *ACM SACMAT*, *IEEE ICSC*, *IEEE Cloud and INFOCOM*. He has been invited to give keynotes and invited talks at a number of conferences hosted by *IEEE* and *ACM*. In addition, he has conducted tutorial sessions in prominent conferences such as *ACM SIGKDD 2016*, *IEEE CollaborateCom 2014*, *CloudCom 2013*, *PAKDD 2011 & 2012*, *DASFAA 2012*, *ACM WWW 2005*, *MIS2005*, *DASFAA 2007*, and *WI 2008*. As of today, fifteen Ph.D. students have graduated under Dr. Khan's supervision and one of them (Dr. Feng Luo) is currently working as an *associate professor* in *Computer Science* department at *Clemson University*, USA. Dr. Khan also collaborates actively with top researchers from *MIT*, *UIUC*, *UMN*, *Purdue* and *IBM TJ Watson Research*. (For further information please check: <http://www.utdallas.edu/~lkhan>)

KEYNOTE ADDRESSES

- Keynote, "Stream Data Mining: A Big Data Perspective," 2ND SIGKDD Workshop on Mining and Learning from Time Series, San Francisco, CA, August 2016
- Keynote/Invited Speaker: "Geo-Spatial Big Data Processing," *IEEE International Symposium on Multimedia, IEEE ISM 2015*, Miami, Florida | December 14-16
- Keynote speaker: "Stream Data Mining and Applications: A Big Data Perspective," *4th International Workshop on Big Data, Streams and Heterogeneous Source Mining: Algorithms, Systems, Programming Models and Applications*, In conjunction with KDD 2015, 8/10, Sydney, Australia
- Stream Mining, *International Workshop on Reliability Aware Data Fusion in Participatory Networks, in Conjunction with 2013 SIAM Data Mining Conference (SDM)*, May 4, 2013, Austin, Texas.
- Sixth International Conference on *Mathematical Methods, Models, and Architectures for Computer Network Security, (MMM-ACNS-2012)*, October 17-20, 2012, St. Petersburg, Russia.
- Second International Workshop on *Scientific Analysis and Policy Support for Cyber Security (SA&PS4CS'12)*, October 20, 2012, St. Petersburg, Russia.
- Pacific Asia Workshop on Intelligence and Security Informatics, In Conjunction with PAKDD2012, May 29, 2012, Kuala Lumpur, Malaysia.
- *KDCloud 2011: International Workshop on Knowledge Discovery Using Cloud and Distributed Computing Platforms*, in conjunction with *IEEE ICDM 2011*, 11 December 2011, Vancouver, Canada.
- *Stream Mining and Its Applications, 14th International Conference on Computer and Information Technology (ICCIT)*, 2011.
- Adaptive Stream Mining: *SUTC 2010: 2010 IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing*, June 7 - 9, 2010, Newport Beach, California, USA.
- Geospatial Schema Matching With High-Quality Cluster Assurance and Location Mining from Social Network, *Third International Workshop on Semantic Aspects in Data Mining (SADM'10) in conjunction with the 2010 IEEE International Conference on Data Mining (ICDM 2010)*, Sydney, Australia, Dec. 2010.

- Matching Words and Pictures: Problems, Application and Progress, *9th International Conference on Computer and Information Technology (ICCIT)*, 2006.
- Co-author of over 30 keynote address presentations.

AWARDS

- **IEEE Technical Achievement Award**, IEEE Systems Man and Cybernetics Society and the IEEE Transportation Systems Society, 2012.
- **ACM Distinguished Scientists**, since Dec 2012.
- UTD Inventor Award, April 2010, Dec 2011
- UTD Author Recognition Award, October 2009
- **Best Paper Award:** Pallabi Parveen, Zackary R Weger, Bhavani Thuraisingham, Kevin W. Hamlen, Latifur Khan, "Supervised Learning for Insider Threat Detection Using Stream Mining," *Proceedings of the 23rd IEEE International Conference on Tools with Artificial Intelligence*, Nov. 7-9, 2011, Boca Raton, Florida, USA.
- **Best Paper Award:** Ahmad Adel Abu-Shareha, Mandava Rajeswari, **Latifur Khan**, Dhanesh Ramachandram, "Multimodal Concept Fusion using Semantic Closeness for Image Concept Disambiguation", *Proceedings of the 2010 International Workshop on Advanced Future Multimedia Services (AFMS 2010)*, Gwangju, Korea, 9-11 December 2010 (21 papers were presented in the workshop and this paper received the best paper award—more information: <http://www.ftrai.org/afms2010/wcc2010-final.pdf>).
- **Best Paper Award:** Yohan Jin, Kibum Jin, **Latifur Khan**, B. Prabhakaran, "The Randomized Approximating Graph Algorithm for Image Annotation Refinement Problem", *Workshop on Semantic Learning Applications in Multimedia in conjunction with 2008 IEEE Conference on Computer Vision and Pattern Recognition*, Alaska, USA, July 2008. (In the workshop, 10 papers were presented by researchers from UCSD, UCLA, RPI, UIUC, University of Toronto, University of Washington, University of Wisconsin, UTD and UTD paper received the best paper award—more information: http://www.ecse.rpi.edu/slam08/SLAM08_scheduleV2.pdf).
- Chancellor Award from the **President** of Bangladesh.

CHAIR/CO-CHAIR OF CONFERENCES:

- Program co-chair, IEEE BigDataService 2017, San Francisco, CA, April 2017.
- Program co-Chair: *The 20th Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD) 2016*, April 2016, Auckland, NZ
- Program co-Chair: *IEEE Intelligence and Security Informatics (ISI) 2016*, Tucson, Arizona, USA, September, 2016
- General co-Chair: *IEEE 5th International Congress on Big Data*, BigData 2016, June, 2016, San Francisco, USA
- Program co-Chair: *IEEE 4th International Congress on Big Data*, BigData 2015, June 27 - July 2, 2015, New York, USA
- Program co-Chair: *IEEE Intelligence and Security Informatics (ISI) 2013*, Seattle Washington, USA, June 4-7, 2013
- Local co-Chair: *ICDM '13: The 13th IEEE International Conference on Data Mining*, December, 2013, Dallas, Texas, USA.
- Local co-Chair: *2013 SIAM Data Mining Conference*, Austin, Texas, April, 2013
- Workshop Selection co-chair of *IEEE International Conference on Intelligence and Security Informatics (ISI 2012)*, June, 2012, Washington DC.

- Program Co-Chair of *HaCDAIS 2011: 2nd International Workshop on Handling Concept Drift in Adaptive Information Systems*, in conjunction with *11th IEEE International Conference on Data Mining (IEEE ICDM 2011)*, Vancouver, Canada, December, 2011.
- Workshop Selection co-chair of *IEEE International Conference on Intelligence and Security Informatics (ISI 2011)*, July 10-12, 2011, Beijing, China
- Program Co-Chair of *International Workshop on Cloud Privacy, Security, Risk & Trust (CPSRT 2010)*, in conjunction with the 2nd IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2010), Indiana, Nov. – Dec. 2010.
- Program Co-Chair of *IEEE International Conference on Intelligence and Security Informatics (ISI-2009)*, June 8-11, 2009, Dallas, Texas, U.S.A.
- Program Co-Chair of *ACM 6th International Workshop on Multimedia Data Mining (MDM/KDD2005)*, August 2005, Chicago, IL, USA.
- Program Chair of *ACM 5th International Workshop on Multimedia Data Mining (MDM/KDD2004)*, August 2004, Seattle, Washington.
- Program Co-Chair in *First International Workshop on Geographic and Biological Data Management (GBDM04)* in conjunction with COMPSAC 2004, September 2004, Hong Kong.
- Poster co-chair in *IEEE International Conference on Intelligence and Security Informatics (ISI-2010)*, May 2010, Vancouver, Canada.

PUBLICITY CO-CHAIR:

- *IEEE CloudCom 2014: 6th IEEE International Conference on Cloud Computing Technology and Science*, Singapore, December, 2014.
- *Fifth IEEE International Conference on Semantic Computing*, September 18-21, 2011, Stanford University, Palo Alto, CA, USA, <http://www.ieee-icsc.org/>.
- *4th IEEE 2011 International Conference on Cloud Computing (CLOUD 2011)*, Washington DC, July, 2011.

SPONSORSHIP CHAIR:

- *12th International Symposium on Spatial and Temporal Databases*, Minneapolis, MN, USA, August, 2011.

PROGRAM COMMITTEE MEMBER OF:

- *14th AAI Conference on Artificial Intelligence (AAAI-17)*, February, 2017, San Francisco, CA.
- *The 21th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Vietnam, May 2017.
- *2016 IEEE Big Data Conference*, Washington DC, December, 2016.
- *25th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2016)* November, Seattle, Washington, USA
- *22th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2016, San Francisco, USA.
- *Thirtieth AAI Conference on Artificial Intelligence (AAAI-16)*, February 12–17, 2016, Phoenix, AZ.
- *21th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2015, Sydney, Australia.

- ICDM '15: The *15th IEEE International Conference on Data Mining*, December, 2015, NJ, USA.
- The *19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Vietnam, May 2015.
- *24th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2015)* November, 2015 — Seattle, Washington, USA
- *ACM International Conference on Information and Knowledge Management (CIKM 2015)*, Melbourne, Australia, Oct-Nov 2015.
- The *18th IEEE International Conference on Information Reuse and Integration*, Pittsburgh, PA, July 2016.
- The *17th IEEE International Conference on Information Reuse and Integration*, San Francisco, CA.
- *3rd International Congress on Big Data* June 27 - July 2, 2014, Anchorage, Alaska, USA
BigData 2014
- *IEEE 2014 Joint Intelligence and Security Informatics Conference (JISIC)*, September 24-26, 2014, Netherlands.
- The *18th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Taiwan, May 2014.
- ICDM '14: The *14th IEEE International Conference on Data Mining*, December, 2014, Schenzhen, China.
- The *16th IEEE International Conference on Information Reuse and Integration*, San Francisco, CA.
- *22st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2013)* November 5-8, 2014 — Dallas, TX, USA
- *ACM International Conference on Information and Knowledge Management (CIKM 2014)*, Shanghai, China, Oct-Nov 2014.
- ICDM '13: The *13th IEEE International Conference on Data Mining*, December, 2013, Dallas, Texas, USA.
- *19th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2013, Chicago, USA.
- *ACM International Conference on Information and Knowledge Management (CIKM 2013)*, San Francisco, CA, Oct-Nov 2013.
- *IEEE International Conference on Tools with Artificial Intelligence (ICTAI) - 2013*, November 2013, Washington DC.
- *21st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2013)* November 5-8, 2013 — Orlando, Florida, USA
- *18th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2012, Beijing, China.
- ICDM '12: The *12th IEEE International Conference on Data Mining*, December, 2012, Belgium.
- *20th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2012)*, November 6-9 2012 — Redondo Beach, California.
- *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD)*, Bristol, UK, September, 2012.
- *NASA Conference on Intelligent Data Understanding (CIDU)*, Boulder, Colorado, October, 2012.
- Poster Paper, *21th International World Wide Web Conference*, April 2012, Lyon, France.
- *17th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2011, San Diego, CA, USA.

- ICDM '11: The *11th IEEE International Conference on Data Mining*, December, 2011, Vancouver, Canada.
- European Conference on *Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD)*, Athens, Greece, September, 2011.
- *19th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2011)*, November, 2011, Chicago, Illinois.
- *20th ACM Conference on Information and Knowledge Management (CIKM)*, October 2011, Glasgow, UK
- *23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2011)*, Nov. 7-9, 2011, Boca Raton, Florida, USA
- *NASA Conference on Intelligent Data Understanding (CIDU 2011)*, Mountain View, California.
- Poster Paper, *20th International World Wide Web Conference*, April 2011, Hyderabad, India.
- ICDM '10: The *10th IEEE International Conference on Data Mining*, December 13-17, 2010, Sydney, Australia.
- *18th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2010)*, November 2 - 5, 2010, San Jose, California.
- *16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, July 2010, Washington DC.
- The *14th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Hyderabad, India, June 2010.
- *NASA Conference on Intelligent Data Understanding (CIDU)*, Mountain View, California, 2010, 2011.
- ICDM '09: *2009 IEEE International Conference on Data Mining (ICDM 2009)*, December 2009, Miami, Florida, USA.
- *15th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, July 2009, Paris, France.
- *SDM '09: 2009 SIAM International Conference on Data Mining*, April 30 - May 2, Nevada, USA.
- *13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09)*, Bangkok, Thailand, April 27 - 30, 2009.
- *International Conference on Computers and Information Technology*, December 2009, Bangladesh.
- *SDM '08: 2008 SIAM International Conference on Data Mining*, Atlanta, Georgia, USA, April 24 - 26, 2008.
- *24th International Conference on Data Engineering (ICDE)*, April 7 - 12, 2008, Cancún, México.
- *Twelfth ACM Symposium on Access Control Models and Technologies (SACMAT)*, Nice, France, July 2008.
- *International Conference on Computers and Information Technology*, December 2008, Bangladesh.
- *2007 IEEE International Conference on Data Mining (ICDM)*, Omaha, NE, December 2007.
- *12th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2006, Philadelphia, USA.
- *IEEE International Conference on Data Mining (ICDM)*, ICDM 2006 December 18 - 22, 2006, Hong Kong.
- *17th European Conference on Machine Learning and 10th European Conference on Principles and Practice of Knowledge Discovery in Databases*, September 2006, Berlin, Germany
- *International Conference on Computers and Information Technology*, December 2006, Dhaka, Bangladesh.

- *11th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2005, Chicago, Illinois.
- *Workshop on Clustering High Dimensional Data and its Applications*, in Conjunction with the Fifth SIAM International Conference on Data Mining (SDM 2005), April 2005, Newport Beach, California.
- *International Conference on Computers and Information Technology*, December 2004, Dhaka, Bangladesh.
- *16th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, November, 2004, Boca Raton, Florida.
- *12th International Conference on Cooperative Information Systems (CoopIS 2004)*, October 2004, Larnaca, Cyprus.
- *International Conference on Database and Expert Systems Applications DEXA 2004*, September, 2004, Zaragoza, Spain.
- *15th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, November, 2003, Sacramento, California.
- *12th International Conference on Computer Communications and Networks*, October, 2003, Dallas, Texas.
- *International Conference on Database and Expert Systems Applications DEXA 2003*, September, 2003, Prague, Czech Republic.
- *International Workshop on Web Semantics - WebS 2003, in conjunction with International Conference on Database and Expert Systems Applications DEXA 2003*, September, 2003, Prague, Czech Republic.
- *ACM 4th International Workshop on Multimedia Data Mining (MDM/KDD2003)*, August 2003, Washington DC.
- *Fifteenth International Conference on Software Engineering and Knowledge Engineering*, July, 2003, San Francisco Bay.
- *2003 IEEE International Conference on Communications, Global Services and Infrastructure for Next Generation Networking Symposium*, May 2003, Alaska.
- *2003 IEEE International Conference on Multimedia & Expo (ICME)*, July 2003, Baltimore, Maryland.
- *International Conference on Computers and Information Technology*, December 2002, Dhaka, Bangladesh.
- *ACM Third International Workshop on Multimedia Data Mining (MDM/KDD2002)*, July 2002, Alberta, Canada.
- *International Conference on Computers and Information Technology*, December 2001, Dhaka, Bangladesh.
- *ACM Second International Workshop on Multimedia Data Mining (MDM/KDD2001)*, August 2001, San Francisco, USA.
- *International Workshop on Parallel and Distributed Multimedia Processing & Retrieval*, June 2001, Las Vegas, USA.
- Program Committee Member of *ACM 2001 Symposium on Applied Computing*, March, 2001, Las Vegas, USA.

TUTORIAL:

- Tutorial, “*IOT stream Mining*,” *22^h ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2016, San Francisco, USA.

- Tutorial, “Data Stream Mining: Big Data Perspective”, *The 16th IEEE International Conference on Information Reuse and Integration, San Francisco, CA.*
- Tutorial, “Big Stream Data Mining,” *10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, October, 2014, Miami, Florida
- Tutorial, “Data Stream Mining: Big Data Perspective”, *IEEE CloudCom 2013: 5th IEEE International Conference on Cloud Computing Technology and Science*, Bristol, UK, December, 2013.
- Half Day Tutorial, “Data Stream Mining and Its Applications”, *The 16th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Kuala Lumpur, Malaysia, May 2012.
- Tutorial, “Data Stream Mining and Its Applications”, *The 17th International Conference on Database Systems for Advanced Applications (DASFAA)*, April, 2012, Busan, South Korea.
- Half Day Tutorial, “Data Stream Mining Challenges and Techniques”, *The 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Shenzhen, China, May 2011.
- Half Day Tutorial, “Data Mining for Security Applications,” *IEEE International Conference on Intelligence and Security Informatics (ISI-2009)*, June 8-11, 2009, Dallas, Texas, U.S.A.
- Half Day Tutorial, “Matching Words and Pictures: Problems, and Applications in the Web”, *2008 IEEE/WIC/ACM International Conference on Web Intelligence (WI-08)*, December 2008, Sydney, Australia.
- Half Day Tutorial, “Matching Words and Pictures - Problems, Applications, and Progress,” *14th ACM International World Wide Web Conference, WWW2005*, May 2005, Chiba, Japan.
- Half Day Tutorial, “Translating Images to Keywords: Problems, Applications, and Progress,” *MIS 2005 International Workshop on Multimedia Information Systems*, September 2005, Sorrento, Italy.
- Half Day Tutorial, “Matching Words and Pictures: Problems, Applications and Progress,” *ACM Fourteenth Conference on Information and Knowledge Management (CIKM)*, November 2005, Bremen, Germany.
- Half Day Tutorial, “Matching Words and Pictures - Problems, Applications, and Progress,” *12th International Conference on Database Systems for Advanced Applications*, April 2007, Bangkok, Thailand.

SESSION CHAIR:

- *Thirtieth AAAI Conference on Artificial Intelligence (AAAI-16)*, February 12–17, 2016, Phoenix, AZ.
- *2014 Tenth Annual IFIP WG 11.9 International Conference on Digital Forensics*, Vienna, Austria
- *The 16th IEEE International Conference on Information Reuse and Integration, San Francisco, CA.*
- *10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, October, 2014, Miami, Florida
- *2012 IEEE International Conference on Data Mining (ICDM 2012)*, Dec. 2012, Brussels, Belgium.
- *IEEE CLOUD 2012: 5th International Conference on Cloud Computing*, June, 2012, Honolulu, Hawaii, USA
- *The 16th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Kuala Lumpur, Malaysia, May 2012.

- *2011 IEEE International Conference on Data Mining (ICDM 2011)*, Dec. 2011, Vancouver, Canada.
- *23th International Conference on Tools with Artificial Intelligence (ICTAI 2011)*, Boca Raton Florida, USA, Nov 2011.
- *The 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Shenzhen, China, May 2011.
- *2010 IEEE International Conference on Data Mining (ICDM 2010)*, Dec. 2010, Sydney, Australia.
- *22th International Conference on Tools with Artificial Intelligence (ICTAI 2010)*, October 27-29, 2010, Arras, France.
- *European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD 2010*, September 20-24, 2010, Barcelona, Spain.
- *14th Pacific-Asia Conference on Knowledge Discovery and Data Mining*, 21-24 June, 2010, Hyderabad, India.
- *IEEE International Conference on Intelligence and Security Informatics (ISI-2010)*, May 2010, Vancouver, Canada.
- *15th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, July 2009, Paris, France.
- *2008 IEEE International Conference on Data Mining (ICDM 2008)*, Pisa, Italy, December, 2008.
- *ACM 6th International Workshop on Multimedia Data Mining (MDM/KDD2005)*, August 2005, Chicago, Illinois.
- *Workshop on Multimedia and Web Design in IEEE Sixth International Symposium on Multimedia Software Engineering*, December 2004, Miami, Florida.
- *2nd ACM International Workshop on Multimedia Databases in Conjunction ACM CIKM 2004*, November 2004, Arlington, Virginia.
- *16th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, November 2004, Boca Raton, Florida.
- *Bioinfo-9 Session (Clustering Algorithms), 3rd IEEE Symposium on BioInformatics and BioEngineering*, March 2003, Bethesda, Maryland.
- *3rd Session (Image Retrieval), 8th International Workshop on Multimedia Information Systems*, October 2002, Tempe, Arizona.
- *International Conference on Internet Computing 2002*, June 2002, Las Vegas, Nevada.
- *International Conference on Computers and Information Technology*, December 2001, Dhaka, Bangladesh.
- *Cyber Security, SDPS 2010, Transformative Systems Conference, A Transdisciplinary Synthesis of Business, Science, and Engineering*, June 6 - 11, 2010, Crowne Plaza Hotel, Addison, Texas.
- *Managing Ontologies for Complex Systems & Networks, SDPS 2010, Transformative Systems Conference, A Transdisciplinary Synthesis of Business, Science, and Engineering*, June 6 - 11, 2010, Crowne Plaza Hotel, Addison, Texas.

PANELIST:

- *“Big Data Challenges and Opportunities,” 10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, October, 2014, Miami, Florida
- *National Science Foundation (NSF) Panelist at Information & Intelligent Systems (IIS) Division* in 2003, 2004, 2005, 2008, 2010, 2011, 2012, 2014, and 2015.

- *9th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, October 20–23, 2013 Austin, Texas
- *23rd IEEE International Symposium on Software Reliability Engineering*, Nov, 2012, Dallas, TX
- *Sixth International Conference on Mathematical Methods, Models, and Architectures for Computer Network Security, (MMM-ACNS-2012)*, October 17-20, 2012, St. Petersburg, Russia.
- *IEEE International Conference on Intelligence and Security Informatics (ISI-2011)*, June, 2011, Beijing, China.
- *IEEE International Conference on Intelligence and Security Informatics (ISI-2009)*, June 8-11, 2009, Dallas, Texas, U.S.A.

INVITED TALKS:

- *Stream Data Mining and Applications: A Big Data Perspective*, Pacific Northwest National Laboratory (PNNL), Washington, September, 2015,
- *Big Stream Data Mining*, National University of Singapore, (NUS) July 2015.
- *Big Stream Data Analytics*, *IBM TJ Watson Research Center*, NY, August 2014.
- *Big Stream Data Mining*, *Shenzhen Institute of Advanced Integration Technology, Chinese Academy of Sciences, China*, Dec 2014
- *Stream Mining*, *Qatar Computing Research Institute*, Doha, Qatar, June 2014
- *Big Data Stream Mining*, *Shenzhen Institute of Advanced Integration Technology, Chinese Academy of Sciences, China*, June 2013
- *Data Stream Mining and its Applications*, at *Living Analytic, Singapore*, joint research initiative between *Singapore Management University (SMU) and Carnegie Mellon University (CMU)*, June 2012.
- *Novel Class Detection over Stream Data*, *UAE University*, May 2012.
- *Stream Mining*, *Sandia National Laboratory, New Mexico*, Feb 2012
- *Novel Class Detection*, *IUPUI : Indiana University-Purdue University Indianapolis*, Feb 2012.
- *Data Mining research*, *University of North Carolina at Greensboro, NC*, November, 2011.
- *Stream Mining and its Applications*, *Information Sciences Institute (ISI), University of Southern California (USC)*, California, January 2011.
- *Ontology Alignment*, *Department of Computer Science, University of California Los Angeles (UCLA)*, California, January 2011.
- *Stream Mining and its Applications*, *King Saud University (KSU)*, Riyadh, Saudi Arabia, December 2010.
- *Data Stream Mining: Challenges and Techniques*, *22th International Conference on Tools with Artificial Intelligence (ICTAI 2010)*, October 27-29, 2010, Arras, France.
- *Stream Mining and Its Applications*, *Institute for Infocomm Research, Singapore and University of Sains Malaysia (USM)*, Penang, Malaysia, August 2010.
- *Stream Mining and Its applications in Security*, *IEEE International Conference on Intelligence and Security Informatics, ISI 2010*, Vancouver, BC, Canada, May 23 - 26, 2010.
- *Novel Class Detection for Stream Mining Data*, *Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, and United International University (UIU), Bangladesh*, July 2010.
- *Stream Mining and Location Extraction*, *IEEE Computer Society, Dallas Chapter*, March 2010.
- *SPARQL Query Optimization Using Semantic Web*, *Wright State University, Ohio*, November, 2009.
- *Stream Mining and Text Mining at Boeing*, *Seattle*, November 2009.

- GeoSpatial Data Management, *Ahsanullah University of Science and Technology*, Dhaka, Bangladesh, July, 2009.
- Stream Mining, *Bangladesh University of Engineering and Technology (BUET)*, April 2009.
- Multimedia Mining, *University of Lille, France*, December, 2008.
- Malware Detection, *Nanyang Technological University, Singapore*, February, 2008.
- GIS Data Integration at *Raytheon, TX*, 2008.
- Intrusion Detection at *Rockwell Collins, TX*, 2008.
- Text Mining at *NASA, California*, 2007.

ANNUAL PROGRAM REVIEW MEETING:

- Aviation Safety Program Annual Technical Meeting, May 10-12, 2011, St. Louis, Missouri.
- Text Mining, at *NASA Meeting*, Mountain View, California 2010 & 2009 and Washington DC 2008.
- Geo-Spatial Data Integration at *MURI Meeting, Stanford University, California*, October 2009.
- Semantic Web Service for Geo Spatial Data at *NGA meeting, University of Minnesota*, August 2010 & September, 2007.
- Cyber Security Research *AFOSR Meeting*, Washington DC 2012, 2008 and Syracuse, New York, 2006 and 2007.

REVIEWER:

- Invited Reviewer of Book, *Database Systems* by Elmasri and Navathe, Addison, Wesley.
- Invited Reviewer of *Encyclopedia of Computer Science and Engineering*, John Wiley & Sons.
- Invited Reviewer of *IEEE Transactions on Neural Network*, TNN.
- Invited Reviewer of *Journal of Machine Learning Research*.
- Invited Reviewer of *IEEE Intelligent Systems*.
- Invited Reviewer of ACM/Springer *Multimedia Systems Journal*.
- Invited Reviewer of *IEEE Transactions on Knowledge and Data Engineering, TKDE*.
- Invited Reviewer of *IBM Systems Journal*.
- Invited Reviewer of *ACM Transactions on Internet Technology*.
- Invited Reviewer of *VLDB Journal*, ACM/Springer Publisher.
- Invited Reviewer of *IEEE Transactions on Dependable and Secure Computing*.
- Invited Reviewer of *IEEE Transactions on Systems, Man and Cybernetics - Part A*.
- External Reviewer of *ACM Transactions in Asian Language and Info Processing*.
- Invited Reviewer of *International Journal of Cooperative Information Systems (IJCIS)*.

- External Reviewer of *International Journal of Knowledge and Information Systems (KAIS)*, Springer-Verlag.
- Invited Reviewer of *Information and Software Technology*, Elsevier Publisher.
- Invited Reviewer of *World Wide Web Journal (WWWJ)*, Kluwer Academic Publishers.
- Invited Reviewer of *International Journal of Computers and Applications*, ACTA Press, Calgary, Canada.
- Invited Reviewer of *Geoinformatica Journal*, Springer.
- External Reviewer of *Research Grant* at City University of Hong Kong, Hong Kong.

GRANTS:

As a Principal Investigator

Research Grants

- “Situational Awareness of Topic Drift and Birth-Death in Cyber,” with Sandia National Laboratories, *DOE*, 160K (UT Dallas share), Sept 2012-August 2015.
- “MRI: Development of an Instrument for Assured Cloud Computing,” National Science Foundation (NSF), Oct 2012-September, 2015, \$300,000. (PI: Latifur Khan, co-PI: Kevin Hamlen, and Murat Kantarcioglu)
- “Scalability Issue for Large CDR Dataset”, Tektronix, \$35,000 (gift). (PI: Latifur Khan)
- “Malicious Behavior Pattern Extrapolation”, Raytheon, April 2011 - June 2012, \$100,000. (PI: Latifur Khan)
- “Event Cube: An Organized Approach for Mining and Understanding Anomalous Aviation Events”, NASA, Jan. 2008 - May 2011, \$360,000. (PI: Latifur Khan, Co-PI: Vincent Ng)
- “Prototype Geospatial Data Integration Framework for Police Blotter Crime Analysis”, Raytheon, July 2007 - December 2007, \$100,000. (PI: Latifur Khan, Co-PI: Bhavani Thuraisingham)
- “Secure Sensor Semantic Web and Information Fusion”, Air Force Office of Scientific Research, 2009 - 2014, \$1.55 million. (PI: Latifur Khan from 2011 - 2014, Co-PI from 2009 – 2011; Bhavani Thuraisingham, PI from 2009 – 2011, Co-PI from 2011 – 2014; Co-PI: Murat Kantarcioglu)
- “Adaptive Malware Detection over Evolving Malwares: Attacks and Defenses”, *US Army*, in collaboration with UTEP. UTD amount \$235K; June 2011 - July 2012. (PI: Latifur Khan, Co-PI: Kevin Hamlen)

- “Spatio-Temporal Pattern Mining for Multi-Jurisdiction Multi-Temporal Activity Datasets”, 2007, *NGA University Research Initiatives (NURI)*, September 2007 – August 2011, \$150,000. (PI: Latifur Khan, Co-PI: Bhavani Thuraisingham)
 - “Ontology Matching and Mapping”, *National Science Foundation*, September 2007 - August 2009, \$212,000. (PI: Latifur Khan, Co-PI: Bhavani Thuraisingham)
 - “Feature Extraction for Finding Images/Video”, Nokia Research Center, Irving, Texas, June, 2005 to November, 2005, \$30,000 (gift). (PI: Latifur Khan)
- “Industrial Graduate Student Research Assistant”, Tango MC & Analytics, LLC, September, 2014- January, 2015, Amount: \$13,492, (PI: Latifur Khan)

Education Grants

- “Virtual Laboratory and Curriculum Development for Secure Mobile Computing NSF, September 2015 -- August 2018, \$299,634.00 (PI: Latifur Khan, Co-PI: Bhavani Thuraisingham, Zhiqiang Lin)
- “Travel Grant for International Symposium on Spatial and Temporal Databases (SSTD),” NSF, March, 2011—June, 2011, \$21,000.00 (PI: Latifur Khan)
- “Training Students for Careers in Information Assurance”, National Security Agency, October 2010 – Nov. 2011, \$44,000 (PI: Latifur Khan, Co-PI: Kamil Sarac)

Equipment Grant/Infrastructure Grants

- “Ontology-based Information Selection and Storing XML data into Databases,” *SUN Academic Equipment Grant Program*, August 2002, \$87,265.
- “Development of an Assured Cloud Infrastructure,” *Air Force Office of Scientific Research*, (AFOSR), *Air Force Office of Scientific Research*, submitted under DURIP program, funded as a *Research Infrastructure and Equipment Grant* by AFOSR, June 15, 2011 - May 14, 2012, \$243,188 (PI: Latifur Khan, Co-PI: Bhavani Thuraisingham, Kevin Hamlen, Murat Kantarcioglu)

As a Co-Principal Investigator/Senior Personnel

Research Grants

- “Modernizing Political Event Data for Big Data Social Science Research” *National Science Foundation*, September 1, 2015--August 31, 2018, \$1,497,358.00 (PI: Patrick Brandt, Co-PI: Latifur Khan, Vincent Ng, Jennifer Holmes).
- “Cybersecurity Research Grant: Deception-enabled Interactive Software for Active Cyber Defense.” National Security Agency (NSA), \$286,592.00, September, 2015- December, 2016, (PI: Kevin Hamlen, Co-PI: Latifur Khan, Zhiqiang Lin).

- “ATD: Efficient online detection based on multiple sensors, with applications to cybersecurity and discovery of biological threats,” *National Science Foundation*, \$392,502, Oct 2013—Sept 2016, (PI: Michael Baron and Co-PI: Latifur Khan).
- “Automated, Binary Evidence-based Attribution of Software Attacks” Air Force Office of Scientific Research,” July 2014 – June 2017, \$480,000.
(PI: Kevin Hamlen, Co-PI: Latifur Khan, Zhiqiang Lin; in the proposal Latifur Khan contributed equally with the PI and co-PIs and this is a 3-way 33%-33% 33% collaboration between the PI and Co-PIs)
- “Science of Cyber Security: A Data Driven Approach,” NSA, 2014-2017, 6.7M (selected for funding), (PI: Bhavani Thuraisingham, Co-PI: Latifur Khan, Kevin Hamlen, Murat Kantarcioglu; in the proposal Latifur Khan contributed equally with the PI and co-PIs and this is a 4-way 25%-25% 25%-25% collaboration between the PI and Co-PIs)
- “TWC: Medium: Collaborative: Policy Compliant Integration of Linked Data”, *National Science Foundation*, \$399,898, September, 2012-August, 2015. (PI: Murat Kantarcioglu, Co-PI(s): Kevin Hamlen and Latifur Khan).
- “Semantic Approach to Behavior based IDS and Its Applications,” MINI MURI: Air Force Office of Scientific Research,” July 2012 – June 2016, \$965,758.
(PI: Bhavani Thuraisingham, Co-PI: Latifur Khan, Kevin Hamlen, Zhiqiang Lin; in the proposal Latifur Khan contributed equally with the PI and co-PIs and this is a 4-way 25%-25% 25%-25% collaboration between the PI and Co-PIs)
- “TC: Small: Collaborative: Protocols for Privacy-Preserving Scalable Record Matching and Ontology Alignment”, National Science Foundation (NSF), Sept 2010 - July 2013, \$259,674.
(PI: Murat Kantarcioglu, Co-PI: Latifur Khan, Bhavani Thuraisingham; Latifur Khan contributed equally with the PI and second Co-PI: This is a 3-way 33%-33%-33% collaboration between the PI and Co-PIs)
- “Reactively Adaptive Malware: Attacks and Defenses”, Air Force Office of Scientific Research,” March 2010 – Feb. 2013, \$ 450,000.
(PI: Kevin Hamlen, Co-PI: Latifur Khan, in the proposal Latifur Khan contributed equally with the PI and this is a 50%-50% collaboration between the PI and Co-PI)
- “CT-T: COLLABORATIVE RESEARCH: A Semantic Framework for Policy Specification and Enforcement in a Need to Share Environment”, *National Science Foundation*, September 2007 - August 2009, \$590,000.
(PI: Bhavani Thuraisingham, Co-PI: Latifur Khan, Murat Kantarcioglu; Latifur Khan contributed equally with the PI and second Co-PI: This is a 3-way 33%-33%-33% collaboration between the PI and Co-PIs)
- “Information Operations Across Infospheres”, *Air Force Office of Scientific Research*, January 2006 - December 2008, \$300,006.
(PI: Bhavani Thuraisingham, Co-PI: Latifur Khan; In the proposal Latifur Khan contributed equally with the PI, this is a 50%-50% collaboration between the PI and Co-PI)
- “Design and Development of Semantic Web and Data Mining Technologies for Geospatial Data”, Raytheon, June 2006 – Nov. 2009, \$400,000.

(PI: Bhavani Thuraisingham, Co-PI: Latifur Khan, in the proposal Latifur Khan contributed equally with the PI and this is a 50%-50% collaboration between the PI and Co-PI)

- “A Distributed Component Repository for Rapid Synthesis of Adaptive Real-Time Systems,” *National Science Foundation*, Sept. 2001 – Aug. 2004, \$499,866. (PI: I-Ling Yen, Co-PI: Farokh Bastani, Latifur Khan and Edwin Sha)
- “Secure Grid/Cloud Information Management”, Department of Defense, 2008 – 2012, \$2.2 million. (PI: Bhavani Thuraisingham, Co-PI: Latifur Khan, Murat Kantarcioglu)
- “Developing Advanced Middleware for Convergence of IT and Telecommunications”, *Alcatel USA*, January 2004, - January 2005, \$227,500. (PI: Farokh Bastani, Co-PI: G. R. Dattatreya, Latifur Khan, and I-Ling Yen)
- TC: Large: Collaborative Research: Privacy-Enhanced Secure Data Provenance, National Science Foundation (NSF), Sept 2011 - July 2016, \$ 912,068.00. (PI: Murat Kantarcioglu, Co-PI: Bhavani Thuraisingham; Senior Personnel: Latifur Khan)
- “Assured Information Sharing”, Multi-university research initiative (MURI) funded by the DoD/AFOSR, 2008 - 2013, \$1 million. (PI: Bhavani Thuraisingham, (2008 – 2010); Murat Kantarcioglu, (2010 – 2013), Senior Personnel: Latifur Khan)

Education Grants

- “Scholarship for Service”, *National Science Foundation*, 2010 – 2013, \$1.8 million. (PI: Kamil Sarac, Co-PI: Bhavani Thuraisingham, Murat Kantarcioglu, Edwin Sha, Senior Personnel: Latifur Khan)
- “Incorporating Software Testing Into Undergraduate Courses”, *National Science Foundation*, \$250,000, Sept 2010 - August 2013. (PI: Eric Wong, Co-PI: Gopal Gupta, Latifur Khan, Sook Kim).
- “Capacity Building for Assured Cloud Computing,” *National Science Foundation*, \$264,580, Sept 2011 - August 2013, (PI: Bhavani Thuraisingham, Co-PI: Kevin Hamlen, Murat Kantarcioglu, Kamil Sarac, Latifur Khan)

Workshop Grants

- “Data and Applications Security: Research Directions and Opportunities”, *National Science Foundation (NSF)*, September 2007 - August 2008, \$49,999. (PI: Bhavani Thuraisingham, Co-PI: Latifur Khan)
- “Intelligence and Security Informatics”, *National Science Foundation*, \$10,000. (PI: Bhavani Thuraisingham, Co-PI: Latifur Khan)

PATENT

- US 8965974: Systems and methods for determining user attribute values by mining user network data and information, Satyen Abrol, Vaibhav Khadilkar, Latifur Rahman Khan, Bhavani Marienne Thuraisingham (U.S. Patent and Trademark Office (USPTO) (granted)
- US 9,165,051: Systems and methods for Detecting a Novel Class, Mohammad Mehedy Masud, Latifur Rahman Khan, Bhavani Marienne Thuraisingham, Qing Chen, Jing Gao, and Jiawei Han, U.S. Patent and Trademark Office (USPTO) (granted)

RESEARCH INTERESTS

Big Data Analytics and Management, Data Mining, Semantic Web, Multimedia Information Management, Cloud Computing, Malware Detection, and Database Systems.

PUBLICATIONS

Disclaimer: Impact Factor for a journal is either found in the journal's website or other relevant web site. For some journals, no impact factor information is traced. Hence, no impact factor information is reported.

Refereed Journal Publications

Published:

1. "Recurring and Novel Class Detection using Class-Based Ensemble for Evolving Data Stream",
Tahseen Al-Khateeb, Mohammad Masud, Khaled Al-Naami, Sadi SEKER, Ahmad Mustafa, **Latifur Khan**, Zouheir Trabelsi, Charu Aggarwal, Jiawei Han
IEEE Transactions on Knowledge & Data Engineering, no. 1, pp. 1, PrePrints, doi:10.1109/TKDE.2015.2507123
2. "GISQAF: MapReduce guided spatial query processing and analytics system."
Khaled Mohammed Al-Naami, Sadi Evren Seker and **Latifur Khan**
Journal of Software: Practice and Experience. John Wiley & Sons, Ltd., doi: 10.1002/spe.2383. (online Publication: Dec 2015).
3. "Implementation and Performance Evaluation of a Scheduling Algorithm for Divisible Load Parallel Applications in a Cloud Computing Environment"
Leila Fayez Ismail and **Latifur Khan**
Journal of Software: Practice and Experience. John Wiley & Sons, Ltd. (Impact Factor: 1.008), Published MAR 2014, DOI: 10.1002/spe.2258, Page 1-16
4. "Classification and Adaptive Novel Class Detection of Feature-Evolving Data Streams,"
Mohammad M. Masud, Qing Chen, **Latifur Khan**, Charu C. Aggarwal, Jing Gao, Jiawei Han, Ashok Srivastava and Nikunj C. Oza
IEEE Trans. Knowledge and Data Engineering (TKDE), 25(7): 1484-1497 (2013).
5. "Evolving Insider Threat Detection Stream Mining Perspective."
Pallabi Parveen, Nathan McDaniel, Zackary R. Weger, Jonathan Evans, Bhavani M. Thuraisingham, Kevin W. Hamlen, **Latifur Khan**
International Journal on Artificial Intelligence Tools 22(5) (2013) (Impact Factor: 0.667)
6. "MapIt: a case study for location driven knowledge discovery and mining."
Satyen Abrol, **Latifur Khan**, Fahad Bin Muhaya
International Journal of Data Mining, Modelling and Management, (IJDMMM) 5(1): 57-75 (2013)

7. "Optimized ontology-driven Query Expansion using Map-Reduce framework to Facilitate Federated Queries."
Neda Alipanah, **Latifur Khan**, Bhavani M. Thuraisingham
Journal of Computer System Science & Engineering, Vol. 27, No. 2, (2012), CRL Publishing, UK
8. "Multimodal Concept Fusion using Semantic Closeness for Image Concept Disambiguation"
Ahmad Adel Abu Shareha, Mandava Rajeswari, **Latifur Khan**, Dhanesh Ramachandram
Multimedia Tools Appl. 61(1): 69-86 (2012) (impact factor: 0.617)
9. "Classification and Novel Class Detection in Concept-Drifting Data Streams under Time Constraints" Mohammad M. Masud, Jing Gao, **Latifur Khan**, Jiawei Han, and Bhavani Thuraisingham
IEEE Transactions on Knowledge & Data Engineering (TKDE), 2011, IEEE Computer Society, June 2011, Vol. 23, No. 6, Page 859-874. (Full paper). (Impact Factor: 2.285)
10. "Heuristics Based Query Processing for Large RDF Graphs Using Cloud Computing"
Mohammad Husain, Mohammad Mehedy Masud, James McGlothlin, and **Latifur Khan**
IEEE Transactions on Knowledge & Data Engineering (TKDE), 2011, IEEE Computer Society, September 2011, Vol. 23, No. 9, Page 1312-1327. (Full paper). (Impact Factor: 2.285)
11. "Facing the Reality of Data Stream Classification: Coping with Scarcity of Labeled Data"
Mohammad Mehedy Masud, Jing Gao, **Latifur Khan**, Jiawei Han, Kevin W. Hamlen, Ph.D.; Nikunj C. Oza
International Journal of Knowledge and Information Systems (KAIS), Vol. 33, No. 1, Page: 213-244 (2011), Springer, 2011. (Impact Factor: 2.211)
12. "Cloud-based Malware Detection for Evolving Data Streams"
Tahseen Al-Khateeb, Mohammad Mehedy Masud, Kevin Hamlen, **Latifur Khan**, Jing Gao, Jiawei Han and Bhavani Thuraisingham
ACM Transactions on Management Information Systems, Vol. 2, No. 3, Page 16-1-27. (Invited Paper)
13. "Geographically-Typed Semantic Schema Matching"
Jeffrey Partyka, P. Parveen, **Latifur Khan**, Bhavani Thuraisingham, Shashi Shekhar
Web Semantics Journal: Science, Services and Agents on the World Wide Web, Elsevier, Vol. 9, No 1, March 2011, Pages 52-70. (Full paper) (Impact Factor is 3.412).
14. "Geospatial Resource Description Framework (GRDF) and security constructs"
Ashraful Alam, **Latifur Khan**, Bhavani Thuraisingham
Computer Standards & Interfaces Vol. 33, No. 1, Page: 35-41 (2011). (Full paper) (Impact Factor: 1.373)
15. "Ontology based policy interoperability in geo-spatial domain"
Mohammad Farhan Husain, Tahseen Al-Khateeb, Mohmmad Alam, **Latifur Khan**
Computer Standards & Interfaces Vol. 33, No. 1, Page: 214-219 (2011). (Full paper) (Impact Factor: 1.373)

16. "Multimodal concept fusion using semantic closeness for image concept disambiguation"
Ahmad Adel Abu-Shareha, Rajeswari Mandava, **Latifur Khan** and Dhanesh Ramachandram
Multimedia Tools and Applications Journal, Springer, January, 2011. (Full paper) (Impact Factor is 0.626)
17. "Weakly Supervised Causality Identification from Aviation Safety Reports via Semantic Lexicon Construction"
Muhammad Abedin, Vincent Ng and **Latifur Khan**
Journal of Artificial Intelligence Research (JAIR) by AAAI press, Vol. 38 (2010) Page 569-631. (Full paper)
18. "Integrated Risk Evaluation for Automated Security Management"
Mohammad Salim Ahmed, Ehab Al Shaer and **Latifur Khan**
Journal of Network and Systems Management, Special Issue on Security Management, Springer. *Journal of Network and Systems Management (JNSM)*, Springer New York, ISSN 1064-7570, pp. 1-24, 2010. (Full Paper) (Impact Factor: 1.356)
19. "Secure Data Objects Replication in Data Grids"
Manghui Tu, Peng Li, I-Ling Yen, Bhavani Thuraisingham, and **Latifur Khan**
IEEE Transactions on Dependable and Secure Computing, January-March 2010, Vol. 7 No.1, page 50-64. (Full Paper) (Impact Factor: 2.093)
20. "Analysis of Firewall Policy Rules Using Traffic Mining Techniques,"
Muhammad Abedin, Syeda Nessa, **Latifur Khan**, Ehab S. Al-Shaer, Mamoun Awad,
International Journal of Internet Protocol Technology, Special Issue on: Recent Advances in Network Security Attacks and Defenses, Volume 5, Numbers 1-2, 9 April 2010, pp. 3-22 (20) Inderscience Publishers. (Full paper)
21. "Bi-directional Translation of Relational Data into Virtual RDF Stores"
Sunitha Ramanujam, Vaibhav Khadilkar, **Latifur Khan**, Steven Seida, Murat Kantarcioglu, Bhavani Thuraisingham
International Journal of Semantic Computing (IJSC), World Scientific, Vol. 4, No. 4, Page: 423-457, 2010. (Full Paper)
22. "Relationalization of Provenance Data in Complex RDF Reification Nodes",
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida and Bhavani Thuraisingham
Electronic Commerce Research Journal - special issue on Trust and Privacy Aspects of Electronic Commerce (Invited Paper), Vol. 10, No. 3-4, Page: 389-421, 2010, Springer Netherlands.
(Full paper)
23. "Knowledge-based Image Annotation Refinement"
Yohan Jin, **Latifur Khan**, and Balakrishnan Prabhakaran
Journal of Signal Processing Systems, Springer New York, Volume 58, Number 3 March, 2010, Page:387-406
(Full Paper) (Impact Factor: 0.533)
24. "R2D: A Framework for the Relational Transformation of RDF Data"
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida and Bhavani Thuraisingham
International Journal of Semantic Computing (IJSC), World Scientific Publisher (Special issue) Volume: 3, Issue: 4 (2009) pp. 471-498, DOI: 10.1142/S1793351X09000884.

(Full paper)

25. "Exploiting an antivirus interface"
Kevin W. Hamlen, Vishwath Mohan, Mohammad M. Masud, **Latifur Khan**, Bhavani M. Thuraisingham,
Computer Standards & Interfaces, Vol. 31 No. 6, Page: 1182-1189 (2009)
(Full Paper), (Impact factor: 1.373)
26. "Multi-label Large Margin Hierarchical Perceptron"
Clay Woolam, and **Latifur Khan**,
International Journal of Data Mining, Modelling and Management, Vol. 1, No 1, 2008, Page:
5-22 (2008), INDERSCIENCE Publishers, UK.
(Full Paper)
27. "A Scalable Multi-level Feature Extraction Technique to Detect Malicious Executables"
Mohammad Masud, **Latifur Khan**, and Bhavani Thuraisingham,
Information Systems Frontiers, Springer Netherlands, Vol. 10, No. 1, Page 33-45, Springer.
(Full Paper) (Impact factor: 1.309)
28. "Predicting WWW Surfing Using Multiple Evidence Combination"
Mamoun Awad, **Latifur Khan**, and Bhavani Thuraisingham
The VLDB Journal: The International Journal on Very Large Databases, Vol. 17, No. 3, Page
401-417 (2008), ACM/Springer-Verlag Publishing.
(Full Paper) (Impact Factor: 4.517)
29. "Web Navigation Prediction Using Multiple Evidence Combination and Domain Knowledge"
Mamoun Awad and **Latifur Khan**
IEEE Transactions on Systems, Man, and Cybernetics, Part A, Vol. 37, No. 6, Page 1054 -
1062, November 2007. (Full Paper) (Impact Factor: 0.821)
30. "Constructing gene co-expression networks and predicting functions of unknown genes by
random matrix theory"
Feng Luo, Yunfeng Yang, Jianxin Zhong, Haichun Gao, **Latifur Khan**, Dorothea K.
Thompson, Jizhong Zhou,
BMC Bioinformatics 2007, 8:299, doi:10.1186/1471-2105-8-299. (Full Paper) (Impact Factor:
3.43)
31. "A Framework for a Video Analysis Tool for Suspicious Event Detection"
Gal Lavee, Bhavani Thuraisingham and **Latifur Khan**
Multimedia Tools and Applications Journal, Springer, A Special issue of Multimedia Data
Mining, Vol. 35, No. 1, Page 109-123, October 2007. (Full Paper) (Impact Factor is 0.626)
32. "Email Worm Detection using Data Mining"
Mohammad Masud, **Latifur Khan**, and Bhavani Thuraisingham
International Journal of Information Security and Privacy, 2007, Vol. 1, Issue 4, Page: 47-61
(Full Paper).
33. "Rapid Goal-Oriented Automated Software Testing using MEA-Graph Planning"
Manish Gupta, Farokh Bastani, **Latifur Khan**, and I-Ling Yen

- Software Quality Journal*, Springer, Vol. 15, No. 3, Page 241-263, September, 2007. (Full Paper) (Impact Factor: 0.977)
34. "A Framework for Automated Image Annotation"
Lei Wang, **Latifur Khan**, and Bhavani Thuraisingham
International Journal of Computer Systems Science and Engineering, CRL Publishing LTD, United Kingdom, Vol. 22 No. (1-2), Page 15-24 January-March 2007.
(Full Paper)
 35. "A New Intrusion Detection System using Support Vector Machines and Hierarchical Clustering"
Latifur Khan, Mamoun Awad, and Bhavani Thuraisingham
The VLDB Journal: The International Journal on Very Large Databases, ACM/Springer-Verlag Publishing, Vol. 16, No. 1, Page 507-521, (January 2007). (Full Paper) (Impact Factor: 4.517)
 36. "Standards for Image Annotation Using Semantic Web"
Latifur Khan
Computer Standards and Interface Journal, Vol. 29, No. 2, Page 196-204, Elsevier Publishing, North Holland, (February 2007). (Full Paper) (Impact factor: 1.373)
 37. "Standards for Secure Data Sharing Across Organizations"
Douglas Harris, **Latifur Khan**, Raymond Paul, and Bhavani Thuraisingham
Computer Standards and Interface Journal, Vol. 29, No. 1, Page 86-96, Elsevier Publishing, North Holland (January 2007). (Full Paper) (Impact factor: 1.373)
 38. "Automatic Image Annotation and Retrieval using Weighted Feature Selection"
Lei Wang and **Latifur Khan**
Multimedia Tools and Applications Journal, Vol. 29, No. 1, Page 55-71, Springer (April 2006).
(Full Paper) (Impact Factor is 0.626)
 39. "Real-time Classification of Variable length Multi-attribute Motion Data"
Chuanjun Li, **Latifur Khan**, and Balakrishnan Prabhakaran
International Journal of Knowledge and Information Systems (KAIS), Vol. 10, No. 2, Page 163-183, Springer-Verlag (August 2006). (Full Paper) (Impact Factor is 2.211)
 40. "Secure Knowledge Management: Confidentiality, Trust, and Privacy"
Elisa Bertino, **Latifur Khan**, Ravi Sandhu, and Bhavani Thuraisingham
IEEE Transactions on Systems, Man and Cybernetics, Part A, A Special Issue on Secure Knowledge Management, Vol. 36, No. 3, Page 429-438, (May 2006). (Full Paper) (Impact Factor: 0.821)
 41. "A Repository for Component-Based Embedded Software Development"
Tong Gao, Hui Ma, I-Ling Yen, **Latifur Khan**, and Farokh Bastani
International Journal of Software Engineering & Knowledge Engineering, Vol. 16, No. 4, Page 523- 552, World Scientific Publishing Co., Singapore (August 2006). (Full Paper) (Impact Factor: 0.44)
 42. "A Study of the Model and Algorithms for Handling Location Dependent Continuous Queries"
Manish Gupta, Manghu Tu, **Latifur Khan**, Farokh Bastani, and I-Ling Yen

The International Journal of Knowledge and Information Systems (KAIS), Springer- Verlag, Vol. 8, No. 4, Page 414-437 (November 2005). (Full Paper) (Impact factor is 2.21)

43. "Hierarchical Clustering for Complex Data"
Latifur Khan and Feng Luo
The International Journal on Artificial Intelligence Tools, World Scientific Publishers, Vol. 14, No. 5 Page 791-810, (October 2005). (Full Paper) (Impact Factor: 0.667)
44. "A Framework for Effective Annotation of Information from Closed Captions Using Ontologies"
Latifur Khan, Dennis McLeod, and Eduard Hovy
The Journal of Intelligent Information Systems (JIIS), Kluwer Academic Publishers, Vol. 25, No. 2 Page 181-205, (September 2005). (Full Paper) (Impact Factor: 0.98)
45. "A Dynamically Growing Self-Organizing Tree (DGSOT) for Hierarchical Clustering Gene Expression Profiles"
Feng Luo, **Latifur Khan**, Farokh Bastani, I-Ling Yen, and J. Zhou
The Bioinformatics Journal, Oxford University Press, UK, Vol. 20, No.16, Page 2605-2617, (November 2004). (Full Paper) (Impact Factor: 4.926)
46. "Change Detection in XML Documents for Fixed Structures using Exclusive-Or (XOR)"
Latifur Khan, Qing Chen, and Lei Wang
Journal of Digital Information Management (JDIM), Digital Information Research Foundation Publishing, Vol. 2, No. 3, Page 142-147, (September 2004). (Short Paper)
47. "Retrieval Effectiveness of Ontology-based Model for Information Selection"
Latifur Khan, Dennis McLeod, and Eduard Hovy
VLDB Journal: The International Journal on Very Large Databases, ACM/Springer-Verlag Publishing, Vol. 13, No. 1, Page 71-85, (January 2004). (Full Paper) (Impact Factor: 4.517)
48. "An Adaptive Probe-Based Technique to Optimize Join Queries in Distributed Internet Databases"
Latifur Khan, Dennis. McLeod, and Cyrus Shahabi
International Journal of Database Management, Idea Group Publishing, Hershey, PA, Vol. 12, No. 4, Page 3-14, (October-December 2001). (Full Paper) (Impact Factor is 2.0)
49. "A Probe-Based Technique to Optimize Join Queries in Distributed Internet Databases"
Cyrus Shahabi, **Latifur Khan**, and Dennis. McLeod
International Journal of Knowledge and Information Systems (KAIS), Springer-Verlag Publishing, Heidelberg, Germany, Vol. 2, No. 3, Page 372-385, (August 2000). (Short Paper) (Impact Factor is 2.211)

Accepted

50. "Online Anomaly Detection for Multi-source VMware Using a Distributed Streaming Framework"
Mohiuddin Solaimani, Mohammed Iftexhar, **Latifur Khan**, Bhavani Thuraisingham, Joe Ingram
To appear in *Journal of Software: Practice and Experience*. John Wiley & Sons, Ltd. (Impact Factor: 1.008).

Others (Articles in Magazine/Thesis):

51. "AI and Security Informatics"
Hsinchun Chen, David B. Skillicorn, Bhavani Thuraisingham, **Latifur Khan**, Murat Kantarcioglu, and Christopher C. Yang
IEEE Intelligent Systems (ISSN 1541-1672), September/October 2010, Page 82-90, IEEE Computer Society.
52. "Emergency Response Applications: Dynamic Plume Modeling and Real-Time Routing"
Pavan Kumar Chitumalla, Douglas Harris, Bhavani M. Thuraisingham, and **Latifur Khan**
IEEE Internet Computing, Vol. 12, No. 1, Page 38-44, January - February 2008
53. "The 6th International Workshop on Multimedia Data Mining (MDM/KDD2005)"
Fatma Bouali, **Latifur Khan** and Florent Masseglia
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54. "The 5th International Workshop on Multimedia Data Mining (MDM/KDD2004)"
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55. "MDM/KDD2003: Multimedia Data Mining"
Valery Petrushin, Anne Kao, and **Latifur Khan**
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56. "Ontology-based Information Selection"
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57. "Robust Query Expansion Guided by Ontology Structure and Rank to Facilitate Federated Queries"
Neda Alipanah, P. Parveen, **Latifur Khan**, Bhavani Thuraisingham
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58. Design and Implementation of Data Mining Tools
Mamoun Awad, **Latifur Khan**, Bhavani Thuraisingham and Lei Wang (Hardcover)
272 pages, Auerbach Publications; June 18, 2009, CRC Press.
59. Data Mining Tools for Malware Detection
Mehedy Masud, **Latifur Khan**, Bhavani Thuraisingham (Hardcover)
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60. Multimedia Data Mining and Knowledge Discovery

Editors: Valery Petrushin and **Latifur Khan**
Springer, ISBN 1-84628-436-8, 2006.

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61. 2015 IEEE International Congress on Big Data,
Barbara Carminati, Latifur Khan: New York City, NY, USA, June 27 - July 2, 2015. IEEE
2015, ISBN 978-1-4673-7278-7

62. 2013 IEEE International Conference on Intelligence and Security Informatics,
Kristin Glass, Richard Colbaugh, Antonio Sanfilippo, Anne Kao, Michael Gabbay, Courtney
Corley, Jiexun Li, **Latifur Khan**, Adam Wynne, Lisa Coote, Wenji Mao, Daniel Zeng, Ahmad
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Bhavani Thuraisingham, **Latifur Khan**, Ganesh Subbiah, Ashraful Alam and Murat
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Encyclopedia of Geographical Information Science, Editor: Shashi Shekhar and Hui Xiong
Springer Verlag, 2008, Page: 898-902

64. "Geospatial Semantic Web, Definition"
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65. "A New Hierarchical Approach for Image Clustering"
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66. "Data Complexity in Clustering Analysis of Gene Microarray Expression Profiles"
Feng Luo and **Latifur Khan**
Complexity in Pattern Recognition, Page 217-239, Editor Mitra Basu and Tin Kam Ho,
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71. "Change Detection of RDF Documents Using Signatures"
Latifur Khan, Lei Wang, and Qing Chen
Real World RDF and Semantic Web, ed. V. Kashyap and L. Shklar, Series of Frontiers of Artificial Intelligence and Applications, IOS Press, ISBN 1-58603-306-9, Page 93-116, Amsterdam, Netherlands (2003).

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72. "Efficient Sampling-Based Kernel Mean Matching",
Swarup Chandra, Ahsanul Haque, Latifur Khan, and Charu Aggarwal,
to appear in *the IEEE International Conference on Data Mining (ICDM)*, Barcelona, Dec 2016
73. "An Adaptive Framework for Multistream Classification",
74. Swarup Chandra, Ahsanul Haque, Latifur Khan, and Charu Aggarwal,
to appear in the *25th ACM International Conference on Information and Knowledge Management (CIKM)*, Indianapolis, Oct 2016.
75. "Adaptive Encrypted Traffic Fingerprinting With Bidirectional Dependence"
Khaled Al-Naami, Swarup Chandra, Ahmad Mustafa, Latifur Khan, Zhiqiang Lin, Kevin Hamlen, and Bhavani Thuraisingham
To appear in *2016 Annual Computer Security Applications Conference (ACSAC)'16*, December 05-09, 2016, Los Angeles, CA, USA
76. "SAND: Semi-Supervised Adaptive Novel Class Detection and Classification over Data Stream",
Ahsanul Haque, **Latifur Khan** and Michael Baron
to appear in *Thirtieth AAAI Conference on Artificial Intelligence (AAAI-16)*, February 12-17, 2016, Phoenix, Arizona.

77. "Efficient Semi-Supervised Adaptive Classification and Novel Class Detection over Data Stream,"
Ahsanul Haque, **Latifur Khan**, Michael Baron and Charu Aggarwal
to appear in *32nd IEEE International Conference on Data Engineering (ICDE)*, May 16-20, 2016 · Helsinki, Finland.
78. "Spark-based Political Event Coding,"
Mohiuddin Solaimani, Rajeevardhan Gopalan, **Latifur Khan**, Bhavani Thuraisingham,
to appear in *The Second IEEE International Conference on Big Data Computing Service and Applications, IEEE BigDataService 2016*, March 29 - April 1, 2016, Oxford, UK
79. "A Comparative Study of Markov Network Structure Learning Methods Over Data Streams"
Swarup Chandra, Vishal Karande and **Latifur Khan**,
Proc. of *2015 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2015)*, Cape Town, South Africa, Dec 2015, Page 795-802.
80. "P2V: Effective Website Fingerprinting Using Vector Space Representations"
Khaled Alnaami, Gbadebo Ayoade, Asim Siddiqui, Nicholas Ruozzi, **Latifur Khan**, Bhavani Thuraisingham,
Proc. of *2015 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2015)*, Cape Town, South Africa, Publication Year: 2015, Page(s):59- 66
81. "Semi Supervised Adaptive Framework for Classifying Evolving Data Stream."
Ahsanul Haque, **Latifur Khan**, Michael Baron:
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82. "Online Prediction of Chess Match Result."
Mohammad M. Masud, Ameera Al-Shehhi, Eiman Al-Shamsi, Shamma Al-Hassani, Asmaa Al-Hamoudi, **Latifur Khan**:
Advances in Knowledge Discovery and Data Mining - 19th Pacific-Asia Conference, PAKDD 2015, Ho Chi Minh City, Vietnam, May 19-22, 2015, Proceedings, Page: 525-537
83. "Detecting and Tracking Emerging Concept Classes in Non-Stationary Data Streams"
Brandon Parker, **Latifur Khan**
Proc. of *Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15)*, Austin, TX, 2015 (acceptance rate 26.67%).
84. "Distributed Adaptive Importance Sampling on Graphical Models Using MapReduce."
Ahsanul Haque, Swarup Chandra, **Latifur Khan** and Charu Aggarwal
2014 IEEE International Conference on Big Data (IEEE BigData 2014), Washington DC, USA.

85. "Stream Mining using Statistical Relational Learning,"
Swarup Chandra, Justin Sahs, **Latifur Khan**, Bhavani Thuraisingham and Charu Aggarwal,
IEEE International Conference on Data Mining series (ICDM), Shenzhen, China, December, 2014. (acceptance rate 17%)
86. "Spark-based Anomaly Detection Over Multi-source VMware Performance Data In Real-time",
Mohiuddin Solaimani, Mohammed Iftexhar, **Latifur Khan**, Bhavani Thuraisingham, and Joey Burton Ingram
Proc. of the *IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2014)*,
Orlando, Florida, USA.
87. "Statistical Technique for Online Anomaly Detection Using Spark Over Heterogeneous Data from Multi-source VMware Performance Data",
Mohiuddin Solaimani, Mohammed Iftexhar, **Latifur Khan**, and Bhavani Thuraisingham,
Proc. of *IEEE International Conference on Big Data 2014 (IEEE BigData 2014)*,
Washington DC, USA.
88. "Evolving Stream Classification using Change Detection"
Ahmad Mustafa, Ahsanul Haque, **Latifur Khan**, Michael Baron, Bhavani Thuraisingham
10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom), October, 2014, Miami, Florida (invited paper).
89. "Evolving Big Data Stream Classification with MapReduce"
Ahsanul Haque, Brandon Parker, **Latifur Khan**, Bhavani Thuraisingham
In Proc. of *7th IEEE International Conference on Cloud Computing (IEEE CLOUD 2014)*,
June 27 - July 2, 2014, Alaska, USA
90. "GISQF: An Efficient Spatial Query Processing System,"
Khaled Mohammed Al-Naami, Sadi Seker, **Latifur Khan**
In Proc. of *7th IEEE International Conference on Cloud Computing (IEEE CLOUD 2014)*,
June 27 - July 2, 2014, Alaska, USA
91. "FSBD: A Framework for Scheduling of Big Data Mining in Cloud Computing"
Leila Ismail, Mohammad M. Masud, **Latifur Khan**
In Proc. of *3rd International Congress on Big Data (BigData 2014)*, June 27 - July 2, 2014,
Anchorage, Alaska, USA
92. "Calculating Edit Distance for Large Sets of String Pairs using MapReduce"
Shagun Jhaver, **Latifur Khan**
In Proc. of *Second ASE International Conference on Big Data Science and Computing (BigDataScience)* - Stanford, CA, USA, May 27 - May 31, 2014
93. "GISQF: An Efficient Spatial Query Processing System,"
Khaled Mohammed Al-Naami, Sadi Seker, Latifur Khan,
7th IEEE International Conference on Cloud Computing, June 27 - July 2, 2014, Alaska, USA

94. "SMV-Hunter: Large Scale, Automated Detection of SSL/TLS Man-in-the-Middle Vulnerabilities in Android Apps"
David Sounthiraraj, Justin Sahs, Zhiqiang Lin, **Latifur Khan**, and Garrett Greenwood.
Proceedings of the 21st ISOC Network and Distributed System Security Symposium (NDSS Symposium 2014), San Diego, CA, February 2014 (acceptance rate 18%)
95. "Host-Based Anomalous Behavior Detection Using Cluster-Level Markov Networks"
Ahmad Mustafa, Mohiuddin Solaimani, **Latifur Khan**, Ken Chiang and Joe Ingram
Proc. of *Tenth Annual IFIP WG 11.9 International Conference on Digital Forensics*, Vienna, Austria, January 8–10, 2014
96. "Real Time Anomaly Detection Over VMware Performance Data Using Storm"
Mohiuddin Solaimani, **Latifur Khan** and Bhavani Thuraisingham
Proc. of the *16th IEEE International Conference on Information Reuse and Integration, San Francisco, CA.* (acceptance rate 20%)
97. "RFID Based Biometrics Analysis Over Cloud"
Faisal Rahman, Mohiuddin Solaimani, **Latifur Khan**
Workshop on Data Science for Social Good in conjunction with ACM KDD 2014, NY, August, 2014
98. "Intelligent MapReduce Based Framework for Labeling Instances in Evolving Data Stream,"
Ahsanul Haque, Brandon Parker, **Latifur Khan** and Bhavani Thuraisingham
Proc. of *IEEE Third International Conference on Cloud Computing Technology and Science (CloudCom)*, Bristol, UK, 2-5 Dec. 2013
99. "Host-based Anomaly Detection Using Learning Techniques"
Ahmad Mustafa, Mohiuddin Solaimani, **Latifur Khan**, Ken Chiang and Joe Ingram
PhD Student Forum, in conjunction with *ICDM '13: The 13th IEEE International Conference on Data Mining*, December, 2013, Dallas, Texas, USA.
100. "MapReduce based Frameworks for Classifying Evolving Data Stream"
Ahsanul Haque and **Latifur Khan**
PhD Student Forum in conjunction with *ICDM '13: The 13th IEEE International Conference on Data Mining*, December, 2013, Dallas, Texas, USA.
101. "Rapidly Labeling and Tracking Dynamically Evolving Concepts In Data Streams"
Brandon Parker and **Latifur Khan**
PhD Student Forum in conjunction with *ICDM '13: The 13th IEEE International Conference on Data Mining*, December, 2013, Dallas, Texas, USA.
102. "Map Reduce Guided Scalable Compressed Dictionary Construction for Repetitive Sequences"
Pallabi Parveen, Bhavani Thuraisingham and **Latifur Khan**
Proc. of *9th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, October 20–23, 2013 Austin, Texas
(invited paper)

103. "Labeling Instances in Evolving Data Streams with MapReduce."
Ahsanul Haque, Brandon Parker, **Latifur Khan**
Proc. of IEEE BigData Congress 2013, Santa Clara, CA: 387-394
104. "Behavioral sequence prediction for evolving data stream."
Sheikh M. Qumruzzaman, **Latifur Khan**, Bhavani M. Thuraisingham
Proc. of IEEE Information Reuse and Integration (IRI), San Francisco, California, 2013: 482-488
105. "Author attribution on streaming data."
Sadi Evren Seker, Khaled Al-Naami, **Latifur Khan**
Proc. of IEEE Information Reuse and Integration (IRI), San Francisco, California, 2013: 497-503
106. "Predicted probability enhancement for multi-label text classification using class label pair association"
Salim Ahmed, Shourav Jain, Fahad Bin Muhaya, and **Latifur Khan**
Proc. of 4th IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2013), Singapore, April 2013
107. "Recurring and Novel Class Detection using Class-Based Ensemble"
Mohammad Masud, Tahseen Al-Khateeb, **Latifur Khan**, Charu Aggarwal, and Jiawei Han
Proc. of IEEE International Conference on Data Mining, 2012, Belgium, Dec 2012, Page 31-40, (acceptance rate 11%).
108. "Novel Class Detection and Feature via a Tiered Ensemble Approach for Stream Mining"
Brandon S Parker, Ahmad Mustafa, **Latifur Khan**
Proc of 24th IEEE International Conference on Tools with Artificial Intelligence(ICTAI), November 7-9, 2012, Athens, Greece.
109. "Unsupervised Ensemble based Learning for Insider Threat Detection"
Pallabi Parveen, Nate McDaniel, Bhavani Thuraisingham, **Latifur Khan**
Proc. of 4th IEEE International Conference on Information Privacy, Security, Risk and Trust (PASSAT), Amsterdam, Netherlands, September 2012.
110. "A Machine Learning Approach to Android Malware Detection"
Justin Sahs, **Latifur Khan**
Proc. of 2012 European Intelligence and Security Informatics Conference, EISIC 2012, Odense, Denmark, August 22-24, 2012. IEEE Computer Society 2012, ISBN 978-1-4673-2358-1, EISIC 2012: 141-147
111. "Measuring Relatedness and Augmentation of Information of Interest within Free Text Law Enforcement Documents"
James R. (Bob) Johnson, Anita Miller, **Latifur Khan**, Bhavani M. Thuraisingham
Proc. of 2012 European Intelligence and Security Informatics Conference, EISIC 2012, Odense, Denmark, August 22-24, 2012. IEEE Computer Society 2012, ISBN 978-1-4673-2358-1, EISIC 2012: 148-155

112. "Cloud Guided Stream Classification Using Class-Based Ensemble"
Tahseen Al-Khateeb, Mohammad M. Masud, **Latifur Khan**, Bhavani M. Thuraisingham Proc. of *IEEE CLOUD 2012: 5th International Conference on Cloud Computing*, June, 2012, Honolulu, Hawaii, USA, Page 694-701
113. "Secure information integration with a semantic web-based framework"
Pranav Parikh, Murat Kantarcioglu, Vaibhav Khadilkar, Bhavani Thuraisingham, **Latifur Khan**
Proc. of the *14th IEEE International Conference on Information Reuse & Integration (IRI)*, IRI 2012: 659-663, Las Vegas, Nevada.
114. Extracting semantic information structures from free text law enforcement data
Johnson, J.R.; Miller, A.; Khan, L.; Thuraisingham, B.
Proc. of *Intelligence and Security Informatics (ISI)*, 2012 *IEEE International Conference*: 10.1109/ISI.2012.6284291, Publication Year: 2012 , Page(s): 177 - 179
115. "Cloud-Centric Assured Information Sharing."
Bhavani M. Thuraisingham, Vaibhav Khadilkar, Jyothisna Rachapalli, Tyrone Cadenhead, Murat Kantarcioglu, Kevin W. Hamlen, **Latifur Khan**, Mohammad Farhan Husain
PAISI 2012: 1-26
116. "Detecting Recurring and Novel Classes in Concept-Drifting Data Streams"
Mohammad M. Masud, Tahseen Al-Khateeb, **Latifur Khan**, Charu C. Aggarwal, Jing Gao, Jiawei Han, Bhavani M. Thuraisingham.
Proc. of 11th IEEE International Conference on Data Mining, ICDM 2011, Vancouver, BC, Canada, December 11-14, 2011, Page: 1176-1181 (acceptance rate 18%)
117. "Supervised Learning for Insider Threat Detection Using Stream Mining,"
Pallabi Parveen, Zackary R Weger, Bhavani Thuraisingham, Kevin W. Hamlen, **Latifur Khan**
Proceedings of the *23rd IEEE International Conference on Tools with Artificial Intelligence*, Nov. 7-9, 2011, Boca Raton, Florida, USA (**Best Paper Award**) (acceptance rate 30%).
118. "Insider Threat Detection using Stream Mining and Graph Mining,"
Pallabi Parveen, Jonathan Evans, Bhavani Thuraisingham, Kevin W. Hamlen, **Latifur Khan**,
Proceedings of the 3rd IEEE Conference on Privacy, Security, Risk and Trust (PASSAT), October 9-12, 2011, MIT, Boston, USA. (acceptance rate 11%)
119. "Estimating Twitter User Location Using Social Interactions-A Content Based Approach"
Swarup Chandra, **Latifur Khan**
Proc. of the Third IEEE International Conference on Social Computing (SocialCom-2011), October 9-12, 2011, MIT, Boston, USA. SocialCom/PASSAT 2011: 838-843
120. "Subjectivity classification and analysis of the ASRS corpus."
Jason Switzer, **Latifur Khan**
Proc. of 2011 IEEE 12th International Conference on Information Reuse & Integration (IRI), Las Vegas, NV, Page: 160-165
121. "Pseudo-Label Generation for Multi-Label Text Classification."
Mohammad Salim Ahmed, **Latifur Khan**, Nikunj C. Oza.

Proceedings of the 2011 Conference on Intelligent Data Understanding, CIDU 2011, October 19-21, 2011, Mountain View, California, USA. NASA Ames Research Center 2011.

122. "Law Enforcement Ontology for Identification of Related Information of Interest Across Free Text Documents"
James R. (Bob) Johnson, Anita Miller, **Latifur Khan**.
Proc. of *European Intelligence and Security Informatics Conference, EISIC 2011*, Athens, Greece, September 12-14, 2011. IEEE 2011, ISBN 978-1-4577-1464-1
123. "Content-Based Geospatial Schema Matching Using Semi-supervised Geo semantic Clustering and Hierarchy"
Jeffrey Partyka, **Latifur Khan**:
Proceedings of the 5th IEEE International Conference on Semantic Computing (ICSC 2011), Palo Alto, CA, USA, September 18-21, 2011. IEEE 2011, ICSC 2011: 247-254
124. "Scalable queries for large datasets using cloud computing: a case study"
James P. McGlothlin, **Latifur Khan**
Proc. of IDEAS 2011: 15th International Database Engineering & Applications Symposium, Lisbon, Portugal: 8-16
125. "Ontology-Driven Query Expansion Using Map/Reduce Framework to Facilitate Federated Queries"
Neda Alipanah, Pallabi Parveen, **Latifur Khan**, Bhavani M. Thuraisingham:
Proc. of IEEE ICWS 2011: 9th International Conference on Web Services, Washington DC, July 2012, Page: 712-713
126. "Learning Cause Identifiers with Fine-Grained Annotations"
Muhammad Abedin, Vincent Ng, and **Latifur Khan**
Proc. of 22nd International Joint Conference on Artificial Intelligence (IJCAI-11), Barcelona, Spain, July 16-18, 2011. (Acceptance rate: 15.7%)
127. "Scalable Complex Query Processing Over Large Semantic Web Data Using cloud"
Mohammad Husain, James McGlothlin, **Latifur Khan** and Bhavani Thuraisingham
Proc. of the Fourth IEEE International Conference on Cloud Computing (CLOUD 2011), July 4-9, 2011, Washington DC, USA. (acceptance rate 18%)
128. "Addressing Concept-Evolution in Concept-Drifting Data Streams"
Mohammad Masud, Qing Chen, **Latifur Khan**, Charu Aggarwal, Jing Gao, Jiawei Han, and Bhavani Thuraisingham,
In Proc. of *2010 10th IEEE International Conference on Data Mining (ICDM 2010)*, Sydney, Australia, Dec 2010. (Acceptance Rate: 19.4%)
129. "Multimodal Concept Fusion using Semantic Closeness for Image Concept Disambiguation"
Ahmad Adel Abu-Shareha, Mandava Rajeswari, **Latifur Khan**, Dhanesh Ramachandram, 2010.
Proceedings of the 2010 International Workshop on Advanced Future Multimedia Services (AFMS 2010). Gwangju, Korea, 9-11 December 2010. **(Best Paper Award)**
130. "Ontology-driven Query Expansion Methods to Facilitate Federated Queries"
Neda Alipanah, P. Parveen, **Latifur Khan**, Bhavani Thuraisingham

In Proc. of *IEEE International Conference on Service-Oriented Computing and Applications (SOCA'10)*, Page 1-8, Perth, Australia, Dec. 2010.

131. "A Token-Based Access Control System for RDF Data in the Clouds"
Arindham Khaled, Mohammad Husain, **Latifur Khan**, Kevin Hamlen, Bhavani M. Thuraisingham
In Proc. of *2nd IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2010)*, Indianapolis November - December 2010. (Acceptance Rate: 25%).
132. "Using Correlation Based Subspace Clustering For Multi-label Text Data Classification"
Mohammad Salim Ahmed, **Latifur Khan**, Mandava Rajeswari
In Proc. of *22th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2010)*, Page: 296-303, October 27 - 29, 2010, Arras, France.
133. "Bi-directional Translation of Relational Data into Virtual RDF Stores"
Sunitha Ramanujam, Vaibhav Khadilkar, **Latifur Khan**, Steven Seida, Murat Kantarcioglu, Bhavani Thuraisingham
In Proc. of *Fourth IEEE International Conference on Semantic Computing (IEEE ICSC2010)*, September 22 - 24, 2010, Carnegie Mellon University, Pittsburgh, PA, USA. (Acceptance Rate = 32%)
134. "A Semantic Web Repository for Managing and Querying Aligned Knowledge."
James McGlothlin, and **Latifur Khan**
In *Proceedings of the International Semantic Web Conference (ISWC)* (poster paper), China, Nov 2010.
135. "Multi-label ASRS Dataset Classification Using Semi Supervised Subspace Clustering"
Mohammad Salim Ahmed, **Latifur Khan**, Nikunj Oza, Mandava Rajeswari
In Proc. of *NASA Conference on Intelligent Data Understanding (CIDU 2010)*, Computer History Museum, Mountain View, CA, October 5 - 6, 2010.
136. "Classification and Novel Class Detection of Data Streams in a Dynamic Feature Space"
Mohammad M. Masud, Qing Chen, Jing Gao, **Latifur Khan**, Jiawei Han, Bhavani Thuraisingham
In Proc. of *European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD 2010*, Barcelona, Spain, September 20 - 24, 2010, Springer 2010, ISBN 978-3-642-15882-7, Page: 337-352. (Acceptance Rate: 18.2%)
137. "TweetHood: Agglomerative Clustering on Fuzzy k-Closest Friends with Variable Depth for Location Mining"
Satyen Abrol, **Latifur Khan**
In Proc. of the *Second IEEE International Conference on Social Computing (SocialCom-2010)*, Minneapolis, USA, August 20-22, 2010 (Acceptance Rate: 13%) (**Nominated for best paper award**).
138. "Materializing and Persisting Inferred and Uncertain Knowledge in RDF Datasets"
James McGlothlin and **Latifur Khan**
In Proc. of *Twenty-Fourth AAI Conference on Artificial Intelligence (AAAI-10)*, Atlanta, Georgia, USA, July 2010. (Acceptance Rate: 26.9%)
139. "Data Intensive Query Processing for Large RDF Graphs Using Cloud Computing Tools"

Mohammad Husain, **Latifur Khan**, Bhavani Thuraisingham and Murat Kantarcioglu
In Proc of *2010 IEEE 3rd International Conference on Cloud Computing (CLOUD 2010)*,
Page 1 – 10, Miami, Florida, USA, July 2010. (Acceptance Rate 20%)

140. “Tweets mining using WIKIPEDIA and impurity cluster measurement”
Qing Chen, Timothy Shipper, **Latifur Khan**
In Proc. of *IEEE International Conference on Intelligence and Security Informatics, ISI 2010*,
Vancouver, BC, Canada, May 23-26, 2010, Page: 141-143
141. “Classification and Novel Class Detection in Data Streams with Active Mining”
Mohammad M. Masud, Jing Gao, **Latifur Khan**, Jiawei Han, and Bhavani Thuraisingham
In Proc of *14th Pacific-Asia Conference on Knowledge Discovery and Data Mining*, 21-24
June, 2010, Page 311-324, - Hyderabad, India. (Acceptance Rate: 10.2%)
142. “A Data Intensive Multi-chunk Ensemble Technique to Classify Stream Data Using Map-Reduce Framework”
Tahseen Al-Khateeb, Mohammad Salim Ahmed, Mohammad Masud and **Latifur Khan**
In Proc. of *SIAM Data Mining 2010 Workshop on High Performance Analytics, Algorithms, Implementations, and Applications 2010*, Columbus, Ohio, USA.
143. “TWinner: Understanding News Queries With Geo-Content Using Twitter”
Satyen Abrol And **Latifur Khan**
In Proc. of *6th Workshop on Geographic Information Retrieval (GIR'10)* at Zurich,
Switzerland, February, 2010 (Acceptance Rate: 71%).
144. “Storage and Retrieval of Large RDF Graph Using Hadoop and MapReduce”
Mohammad Husain, Pankil Doshi, **Latifur Khan**, Bhavani M. Thuraisingham:
In Proc. of *International Conference on Cloud Computing Technology and Science (Cloudcom 2009)*, Beijing, China, 2009, pp. 680-686.
145. “SISC: A Text Classification Approach Using Semi Supervised Subspace Clustering”
Mohammad Ahmed, and **Latifur Khan**
In Proc. of *DDDM'09, the 3rd International Workshop on Domain Driven Data Mining* in
conjunction with ICDM'09, Miami, Florida, USA. (Acceptance Rate: 26.9%).
146. “Geographically-typed semantic schema matching”
Jeffrey Partyka, **Latifur Khan**, Bhavani M. Thuraisingham
In Proc. of *17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2009)*, Page 456-459, Seattle, Washington, November, 2009.
(Acceptance Rate: 36%)
147. “MapIt: Smarter Searches using Location Driven Knowledge Discovery and Mining”
Satyen Abrol, **Latifur Khan** and Tahseen Al-khateeb
In Proc. of *1st SIGSPATIAL ACM GIS 2009 International Workshop on Querying and Mining Uncertain Spatio-Temporal Data (QUeST 2009)* in conjunction with ACM GIS 2009, Seattle, Washington, November, 2009.
148. “R2D: A Bridge between the Semantic Web and Relational Visualization Tools”
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida and Bhavani Thuraisingham

In Proc. of Third IEEE International Conference on Semantic Computing, Page 303-311, Berkeley, CA, USA, September 14-16, 2009. (Acceptance Rate = 30%)

149. "RDFKB: Efficient Support For RDF Inference Queries and Knowledge Management"
James Mcglathlin, and **Latifur Khan**
In Proc. of *International Database Engineering & Applications Symposium (IDEAS)*, Page 259-266, Cetraro (Calabria), Italy, 16-18, September 2009. (Acceptance Rate: 24.6%).
150. "Lacking Labels In The Stream: Classifying Evolving Stream Data With Few Labels"
Clay Woolam, Mohammed Masud, and **Latifur Khan**
In Proc. of *18th International Symposium on Methodologies for Intelligent Systems (ISMIS)*, Page 552-562, September 2009 Prague, Czech Republic. (Acceptance Rate: 54%).
151. "R2D: Extracting relational structure from RDF stores"
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida, Bhavani M. Thuraisingham
In Proc. of *ACM/IEEE International Conference on Web Intelligence*, Page 361-366, September, 2009, Milan, Italy. (Acceptance Rate = 18%)
152. "Semantic Schema Matching Without Shared Instances"
Jeff Partyka, Neda Alipanah, **Latifur Khan**, and Bhavani M. Thuraisingham
In Proc. of *Third IEEE International Conference on Semantic Computing*, Page 297-302, Berkeley, CA, USA, September 14-16, 2009. (Acceptance Rate = 30%)
153. "Integrating Novel Class Detection with Classification for Concept-Drifting Data Streams"
Mohammad Masud, Jing Gao, **Latifur Khan**, Jiawei Han, and Bhavani Thuraisingham
In Proc. of the *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD)*, Page 79-94, Bled, Slovenia, September 7-11, 2009. (Acceptance Rate: 24.9%)
154. "A Relational Wrapper for RDF Reification"
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida and Bhavani Thuraisingham
Proc. of *Third IFIP WG 11.11 International Conference on Trust Management (IFIPTM)*, West Lafayette, USA, June 15-19, 2009.
155. "Relationalizing RDF stores for tools reusability"
Sunitha Ramanujam, Anubha Gupta, **Latifur Khan**, Steven Seida, Bhavani M. Thuraisingham
In Proc. of *18th International Conference on World Wide Web, WWW 2009*, Madrid, Spain, April 20-24, 2009, Page: 1059-1060 (**Nominated for Best Poster Paper Award**). (Acceptance Rate =10%)
156. "A Multi-Partition Multi-Chunk Ensemble Technique to Classify Concept-Drifting Data Streams"
Mohammad Masud, Jing Gao, **Latifur Khan**, Jiawei Han, and Bhavani Thuraisingham
In Proc. of *13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09)*, Page: 363-375, Bangkok, Thailand, April 2009. (Acceptance Rate: 11.5%)

157. “Real-Time Knowledge Discovery and Dissemination for Intelligence Analysis”
Bhavani M. Thuraisingham, **Latifur Khan**, Murat Kantarcioglu, Sonia Chib, Jiawei Han, Sang Son,
In *Proc. of 42st Hawaii International International Conference on Systems Science (HICSS-42 2009)*, January 2009, Waikoloa, Big Island, HI, USA.
158. “A Practical Approach to Classify Evolving Data Streams: Training with Limited Amount of Labeled Data”
Mohammad Masud, Jing Gao, **Latifur Khan**, Jiawei Han, and Bhavani Thuraisingham
In *Proc. of 2008 IEEE International Conference on Data Mining (ICDM 2008)*, Pisa, Italy, Page 929-934, December, 2008. (Acceptance Rate: 19.9%)
159. “Multi-concept Document Classification using a Perceptron-like Algorithm”
Clay Woolam and **Latifur Khan**
In *Proc. of 2008 IEEE/WIC/ACM International Conference on Web Intelligence*, Sydney, Australia, Page 570-574, December, 2008. (Acceptance Rate = 20%)
160. “An Effective Evidence Theory based K-nearest Neighbor(KNN) classification”
Lei Wang, **Latifur Khan**, and Bhavani Thuraisingham,
In *Proc. of 2008 IEEE/WIC/ACM International Conference on Web Intelligence*, Sydney, Australia, Page 797-801, December, 2008. (Acceptance Rate = 20%)
161. “Content-based Ontology Matching for GIS Datasets”
Jeffrey Partyka, Neda Alipanah, **Latifur Khan**, Bhavani Thuraisingham, and Shashi Shekhar
In *Proc. of 16th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2008)*, Page 407-410, Irving, California, November, 2008.
162. “Flow-based Identification of Botnet Traffic by Mining Multiple Log Files”
Mohammad M. Masud, Tahseen Al-khateeb, **Latifur Khan**, Bhavani Thuraisingham, and Kevin W. Hamlen
In *Proc. of the International Conference on Distributed Frameworks & Applications (DFMA'08)*, Penang, Malaysia, Oct 21-22, 2008, pp 200-206.
163. “Ontology Alignment Using Multiple Contexts”
Jeff Partyka, Neda Alipanah, **Latifur Khan**, Bhavani M. Thuraisingham, Shashi Shekhar
In *Proc. of International Semantic Web Conference (Posters & Demos)*, Karlsruhe, Germany, October, 2008.
164. “Software Fault Localization Using N-gram Analysis”
Syeda Nessa, Muhammad Abedin, W. Eric Wong, **Latifur Khan**, and Yu Qi
In *Proc. of Third International Conference on Wireless Algorithms, Systems, and Applications, (WASA 2008)*, Page 548-559, Dallas, TX, USA, October 2008, Springer ISBN 978-3-540-88581-8
165. “The Randomized Approximating Graph Algorithm for Image Annotation Refinement Problem”
Yohan Jin, Kibum Jin, **Latifur Khan**, and Balakrishnan Prabhakaran
Workshop on Semantic Learning Applications in Multimedia in conjunction with 2008 IEEE Conference on Computer Vision and Pattern Recognition, Alaska, July 2008 (**Best Paper Award**).
166. “Privacy/Analysis Tradeoffs in Sharing Anonymized Packet Traces: Single-Field Case”

- Bill Yurcik, Clay Woolam, Greg Hellings, **Latifur Khan**, and Bhavani Thuraisingham
In Proc. of *ARES 2008 – The International Security and Dependability Conference*, March 2008, Page 237-244, Barcelona, Spain. (Acceptance Rate: 21%).
167. “Making Quantitative Measurements of Privacy/Analysis Tradeoffs Inherent to Packet Trace Anonymization”
Bill Yurcik, Clay Woolam, Greg Hellings, **Latifur Khan**, and Bhavani Thuraisingham,
In Proc. of *Financial Cryptography*, Cozumel, Mexico, January 2008, Page 323-324.
168. “A Novel Quantitative Approach For Measuring Network Security”
Mohammad Salim Ahmed, Ehab Al-Shaer, **Latifur Khan**
In Proc. of *Infocom Mini Conference*, April 2008, Pheonix, AZ. (Acceptance Rate: 9.3%)
169. “Towards Autonomic Risk-aware Security Configuration”
Mohammad Salim Ahmed, Ehab Al-Shaer, Mohamed Mahmoud Taibah, Muhammad Abedin,
and **Latifur Khan**
In Proc. of *IEEE/IFIP Network Operations and Management Symposium (NOMS)*, Page 722-725, April 2008, Bahia, Brazil. (Acceptance Rate: 29%)
170. “Geospatial Resource Description Framework (GRDF) and Security Constructs”
Ashraful Alam, **Latifur Khan**, and Bhavani Thuraisingham
In Proc. of *First International Workshop on Secure Semantic Web (SSW'08)* in conjunction with the *24th International Conference on Data Engineering (ICDE'08)* April 7 - 12, 2008, Cancun, México, Page 475-481.
171. “Ontology based Policy Interoperability in Geo-Spatial Domain”
Mohammad Husain, Mohammad Alam, and **LatifurKhan**
In Proc. of *First International Workshop on Secure Semantic Web (SSW'08)* in conjunction with the *24th International Conference on Data Engineering (ICDE'08)* April 7 - 12, 2008, Cancun, México, Page 482-489.
172. “SCRUB-tcpdump: A Software Tool for Multi-Field Multi-Level Packet Trace Anonymization”
Bill Yurcik, Clay Woolam, Greg Hellings, **Latifur Khan**, and Bhavani Thuraisingham
In Proc. of *IEEE/IFIP Network Operations and Management Symposium (NOMS)*, Page 630-644, Salvador da Bahia, Brazil, April 2008. (Acceptance Rate: 29%)
173. “A Data Mining Technique to Detect Remote Exploits”
Mohammad Masud, **Latifur Khan**, Bhavani Thuraisingham, Xinran Wang, Peng Liu and Sencun Zhu
In Proc. of the *Fourth Annual IFIP WG 11.9 International Conference on Digital Forensics*, Japan, January 27 - 30, 2008, Page 177 - 189. (Acceptance Rate: 67%)
174. “Geospatial data qualities as web services performance metrics”
Ganesh Subbiah, Ashraful Alam, **Latifur Khan**, and Bhavani M. Thuraisingham
In Proc. of *15th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2008)*, Page 407-410, Seattle, Washington, November, 2007. (Acceptance Rate 28.7%)
175. “DAGIS: A Geospatial Semantic Web Services Discovery and Selection Framework”
Ashraful Alam, Ganesh Subbiah, **Latifur Khan**, Bhavani M. Thuraisingham

Proc. of GeoSpatial Semantics, Second International Conference, GeoS 2007, Mexico City, Mexico, November 29 - 30, 2007, Proceedings. Lecture Notes in Computer Science 4853 Springer 2007, ISBN 978-3-540-76875-3, Page 268 - 277. (Acceptance Rate: 54%)

176. “Geospatial Data Mining for National Security Land Cover Classification and Grouping for Semantic Assessment”
Chuanjun Li, **Latifur Khan**, Bhavani Thuraisingham, Mohammad Hussain, Shaofei Chen, and Fang Qiu
Proc. of ISI 2007 Intelligence and Security Informatics 2007, New Jersey, May 2007, Page 254 - 261.
177. “Feature based Techniques for Auto-detection of Novel Email Worms”
Mohammad Masud, **Latifur Khan**, and Bhavani Thuraisingham
Proc. of 11th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2007), Nanjing, China, May 2007, LNAI 4426/2007, Page 205 - 216. (Acceptance Rate: 4.7%)
178. “SCRUB-tcpdump: A Multi-Level Packet Anonymizer Demonstrating Privacy/Analysis Tradeoffs”
Bill Yurcik, Clay Woolam, Greg Hellings, **Latifur Khan**, and Bhavani Thuraisingham
Proc. of Third IEEE International Workshop on the Value of Security through Collaboration (SECOVAL), Nice France, September 2007.
179. “Hybrid Model for Auto-Detection of New Malicious Executables”
Mohammad Masud, **Latifur Khan** and Bhavani Thuraisingham
In Proc. of 2007 IEEE International Conference on Communications (ICC 2007): Communications QoS, Reliability and Performance Modeling Symposium, Glasgow, UK, June 2007, Page 1443-1448.
180. “Vulnerability Analysis For Evaluating Quality of Protection of Security Policies”
Muhammad Abedin, Syeda Nessa, Ehab Al-Shaer and **Latifur Khan**
In Proc. of Quality of Protection Workshop with 13th ACM Conference on Computer and Communications Security (CCS-13) Alexandria, Virginia, USA, Virginia, October, 2006.
181. “Reasoning with semantics-aware access control policies for geospatial web services”
Ashrafal Alam, Ganesh Subbiah, Bhavani Thuraisingham, and **Latifur Khan**
In Proc. of the 3rd ACM workshop on Secure web services in conjunction with 13th ACM Conference on Computer and Communications Security (CCS-13) Alexandria, Virginia, USA, Page: 69 – 76, 2006, ISBN:1-59593-546-0.
182. “A Knowledge-based Approach to Detect New Malicious Executables”
Mohammad Masud, **Latifur Khan**, and Bhavani Thuraisingham
In Proc. of the Second Secure Knowledge Management Workshop (SKM) 2006, Brooklyn, NY, USA, September 2006.
183. “Improving Image Annotations using Fuzzy Pruning and Association Rule Mining”
Latifur Khan
In Proc. of ACM 7th International Workshop on Multimedia Data Mining (MDM/KDD206) in conjunction with ACM SIGKDD 2006, Page 39 - 48, Philadelphia, August 2006.
184. “Detection and Resolution of Anomalies in Firewall Policy Rules”
Muhammad Abedin, Syeda Nessa, **Latifur Khan**, Bhavani Thuraisingham

In *Proc. of 20th IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2006)*, Springer-Verlag, July 2006, SAP Labs, Sophia Antipolis, France, Page 15 - 29. (Acceptance Rate: 39%)

185. Access control, confidentiality and privacy for video surveillance databases
Bhavani M. Thuraisingham, Gal Lavee, Elisa Bertino, Jianping Fan, and **Latifur Khan**
In *Proc. of SACMAT 2006, 11th ACM Symposium on Access Control Models and Technologies*, Lake Tahoe, California, USA, June 7-9, 2006, Proceedings. ACM 2006, ISBN 1-59593-353-0, Page: 1-10. (Acceptance Rate: 30%)
186. “Email Worm Detection Using Naïve Bayes and Support Vector Machine”
Mohammad M. Masud, **Latifur Khan**, Ehab Al-Shaer
In *Proc. of ISI 2006 Intelligence and Security Informatics*, San Diego, California, Page 733 - 734, (May 2006).
187. “Analysis of Firewall Policy Rule Using Data Mining Techniques”
Kororsh Golnabi, Richard Min, **Latifur Khan** and Al-Shaer Ehab
In *Proc. of 2006 IEEE/IFIP Network Operations & Management Symposium, (NOMS 2006)*, April 2006 (2006), Page 305 - 315, Vancouver, Canada. (**Nominated for Best Paper Award**) (Acceptance rate: 28.5%)
188. “A Framework for Image Classification”
Mamoun Awad, Yohan Jin, **Latifur Khan**, George Chen, and Fehmi Chebil
In *Proc. of IEEE 2006 Southwest Symposium on Image Analysis and Interpretation*, March 2006 (2006), Page 134 - 138, Denver, Colorado, USA.
189. “Image Annotations By Combining Multiple Evidence & WordNet”
Yohan Chin, **Latifur Khan**, Lei Wang, and Mamoun Awad
In *Proc. of 13th Annual ACM International Conference on Multimedia (MM 2005)*, Singapore, November 2005 (2005), Page 706 - 715. (Acceptance Rate: 16%)
190. “Improving Image Annotations using WordNet”
Yohan Chin, Lei Wang, and **Latifur Khan**
In *Proc. of International Workshop on Multimedia Information Systems (MIS 2005)*, Sorrento, Italy, September 2005 (2005), Page 115 - 130. (Acceptance Rate: 50%)
191. “A Framework for a Video Analysis Tool for Suspicious Event Detection”
Gal Lavee, **Latifur Khan**, and Bhavani Thuraisingham
In *Proc. of Sixth International Workshop on Multimedia Data Mining in conjunction with KDD 2005: The Eleventh ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, Chicago, IL, USA, August 2005 (2005), Page 79 - 84.
192. “Message Correlation in Automated Communication Surveillance through Singular Value Decomposition”
Ryan Layfield, **Latifur Khan**, and Bhavani Thuraisingham
In *Proc of Sixth International Workshop on Multimedia Data Mining in conjunction with KDD 2005: The Eleventh ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, Chicago, IL, USA, August 2005 (2005), Page 85 - 88.
193. “Dependable Real-time Data Mining”
Bhavani Thuraisingham, **Latifur Khan**, Chris Clifton, John Maurer, and Marion Ceruti

Invited Paper in *8th IEEE International Symposium on Object-oriented Real-time Distributed Computing*, Seattle, Washington, May, 2005 (2005), Page 158 - 165.

194. "A Link-based Privacy Preserving Data Mining Framework"
Li Liu, **Latifur Khan**, Bhavani Thuraisingham, and Chris Clifton
In *Proc. of 2005 South Central Information Security Symposium (SCISS '05)*, Austin, Texas, April 2005 (2005), Page 16.
195. "Link Analysis of Social Activity and Suspicious Topic Propagation"
Ryan Layfield, **Latifur Khan**, and Bhavani Thuraisingham
In *Proc. of 2005 South Central Information Security Symposium (SCISS '05)*, Austin, Texas, April 2005 (2005), Page 17.
196. "Suspicious Event Detection in Surveillance Video"
Gal Lavee, Lei Wang, **Latifur Khan**, and Bhavani Thuraisingham
In *Proc. of 2005 South Central Information Security Symposium (SCISS '05)*, Austin, Texas, April 2005 (2005), Page 18.
197. "Automatic Image Annotation and Retrieval using Weighted Feature Selection"
Lei Wang, Li Liu, **Latifur Khan**, and Weili Wu
In *Proc. of IEEE Sixth International Symposium on Multimedia Software Engineering*, Miami, Florida, December 2004 (2004), Page 435-442.
198. "Automatic Image Annotation and Retrieval Using Subspace Clustering Algorithm"
Lei Wang, Li Liu, and **Latifur Khan**
In *Proc. of 2nd ACM International Workshop on Multimedia Databases*, Arlington, Virginia, November 2004 (2004), Page 100-108. (Acceptance Rate: 39%)
199. "An Effective Support Vector Machines (SVM) Performance using Hierarchical Clustering"
Mamoun Awad, **Latifur Khan**, Farokh Bastani, and I-Ling Yen
In *Proc. of the 16th IEEE International Conference on Tools with Artificial Intelligence*, Boca Raton, Florida, November 2004 (2004), Page 663-667. (Acceptance Rate: 30%)
200. "Automated Test Data Generation Using MEA-Graph Planning"
Manish Gupta, Farokh B. Bastani, **Latifur Khan**, and I-Ling Yen
In *Proc. of the 16th IEEE International Conference on Tools with Artificial Intelligence*, Boca Raton, Florida, November 2004 (2004), Page 174-182. (Acceptance Rate: 30%)
201. "Real-time Classification of Multivariate Motion Data Using Support Vector Machines"
Chuanjun Li, Punit R. Kulkarni, Li Liu, B. Prabhakaran, and **Latifur Khan**
In *Proc. of ACM SIGKDD 5th International Workshop on Multimedia Data Mining*, Seattle, Washington, August 2004 (2004), Page 1-7.
202. "A Framework for Image Annotation Using Semantic Web"
Ahmed Bashir and **Latifur Khan**
In *Proc. of ACM SIGKDD First International Workshop on Mining for and from the Semantic Web (MSW 2004)*, Seattle, Washington, August 2004 (2004).
203. "Effective Intrusion Detection Using Support Vector Machines"
Latifur Khan, Mamoun Awad, and Qing Chen

In *Proc. of 2004 South Central Information Security Symposium (SCISS)*, Rice University, Houston, Texas, April 2004 (2004), Page 8.

204. “Hybrid DNA Sequence Similarity Scheme for Training Support Vector Machines”
Mamoun Awad and **Latifur Khan**
In *Proc. of the International Conference on Computer and Information Technology*, Dhaka, Bangladesh, December 2003 (2003), Page 247-251. (Acceptance Rate: 55%)
205. “Automatic Software Clustering Based On a New Hierarchical Algorithm”
Lei Wang, **Latifur Khan**, and I-Ling Yen
In *Proc. of international Workshop on Multimedia Data and Document Engineering (MDDE)*, Berlin, Germany, September 2003.
206. “A New Hierarchical Approach for Image Clustering”
Lei Wang, Mohammad Bayan, **Latifur Khan**, and Vijay Rao
In *Proc. of ACM SIGKDD 4th International Workshop on Multimedia Data Mining*, Washington DC, August 2003 (2003), Page 72 - 79.
207. “Hierarchical Clustering of Gene Microarray Expression Data”
Feng Luo, Kun Tang, and **Latifur Khan**
In *Proc. of Workshop on Clustering High Dimensional Data and its Applications in Conjunction with the Third SIAM International Conference on Data Mining (SDM 2003)*, San Francisco, CA, May 2003 (2003), Page 6 - 17.
208. “Intrusion Detection Using Clustering Approaches”
Latifur Khan
In *Proc. of The South Central Information Security Symposium, SCISS*, University of North Texas, Denton, Texas, April 2003 (2003), Page 3.
209. “Hierarchical Clustering of Gene Expression Data”
Feng Luo, Kun Tang, and **Latifur Khan**
In *Proc. of 3rd IEEE International Symposium on Bio-informatics and Bioengineering*, Bethesda, Maryland, March 2003 (2003), Page 328 - 335. (Acceptance Rate: 44%)
210. “Ontology Construction for Information Selection”
Latifur Khan and Feng Luo
In *Proc. of 14th IEEE International Conference on Tools with Artificial Intelligence*, Washington DC, November 2002 (2002), Page 122 - 127. (Acceptance Rate: 60%)
211. “Automatic Ontology Derivation Using Clustering for Image Classification”
Latifur Khan and Lei Wang
In *Proc. of Eighth International Workshop on Multimedia Information Systems*, Tempe, Arizona, October 2002 (2002), Page 56 - 65.
212. “Effective Management of Location Dependent Continuous Queries in Mobile Environment”
Latifur Khan and Manish Gupta
In *Proc of IEEE DEXA Fifth International Workshop on Mobility in Databases and Distributed Systems*, Aix-en-Provence, France, September 2002 (2002), Page 705 - 709. (Acceptance Rate: 57%)

213. “Ontology-based Image Classification Using Neural Networks”
Casey Breen, **Latifur Khan**, Arun Ponnusamy, and Lei Wang
In *Proc. of SPIE Internet Multimedia Management Systems III*, Boston, MA, July 2002 (2002),
Page 198 - 208.
214. “Object Boundary Detection for Ontology-based Image Classification”
Lei Wang, **Latifur Khan**, and Casey Breen
In *Proc. of Third International Workshop on Multimedia Data Mining in Conjunction with
Eighth ACM SIGKDD*, Edmonton, Alberta, Canada, July 2002 (2002), Page 51 - 61.
(Acceptance Rate: 54%)
215. “Using Blue tooth to Facilitate Communication in a Disaster Relief Scenario”
Mohammad Mirza and **Latifur Khan**
In *Proc. of International Conference on Wireless Networks (ICWN'02)*, Las Vegas, June 2002
(2002), Page 86 - 96. (Acceptance Rate: 48%)
216. “A Component-based Approach for Embedded Software Development”
I-Ling Yen, J. Goluguri, Farokh Bastani, **Latifur Khan**, and John Linn
In *Proc. of 5th IEEE International Symposium on Object-oriented Real-time Distributed
Computing*, Washington, April 2002 (2002), Page 402 - 412.
217. “Change Detection in XML Documents”
Latifur Khan and Yan Rao
In *Proc. of the International Conference on Computer and Information Technology*, Dhaka,
Bangladesh, December 2001 (2001), Page 185 - 189. (Acceptance Rate: 66%)
218. “A Performance Evaluation of Storing XML Data in Relational DBMS”
Latifur Khan and Yan Rao
In *Proc. of ACM 3rd International Workshop on WEB Information and Data Management
(WIDM)*, Georgia, November 2001 (2001), Page 31 - 37. (Acceptance Rate: 32%)
219. “An On-Line Software Repository for Embedded Systems”
I-Ling Yen, **Latifur Khan**, Balakrishnan Prabhakaran, Farokh Bastani, and John Linn
In *Proc. of The Thirteenth IEEE International Conference on Tools with Artificial Intelligence*,
Dallas, TX, November 2001 (2001), Page 314 - 324. (Acceptance Rate: 51)
220. “Effective Retrieval of Audio Information from Annotated Text Using Ontologies”
Latifur Khan and Dennis McLeod
In *Proc. of ACM SIGKDD Workshop on Multimedia Data Mining*, Boston, MA, August 2000
(2000), Page 37 - 45. (Acceptance Rate: 51%)
221. “Disambiguation of Annotated Text of Audio using Ontologies”
Latifur Khan and Dennis McLeod
In *Proc. of ACM SIGKDD Workshop on Text Mining*, Boston, MA, August 2000 (2000), Page
99 - 100.
222. “Audio Structuring and Personalized Retrieval Using Ontologies”
Latifur Khan and Dennis McLeod
In *Proc. of IEEE Advances in Digital Libraries, Library of Congress*, Washington, DC, May
2000 (2000), Page 116 - 126. (Acceptance Rate: 42%)

223. “Improving the Performance of Audio-Based Similarity Queries with Clustering”
Cyrus Shahabi, Mohammad Alshayegi, Ning Jiang, and **Latifur Khan**
In *Proc. of ACM First International Workshop on Multimedia Intelligent Storage and Retrieval Management*, Orlando, FL, November 1999 (1999).
224. “Structuring and Querying Personalized Audio Using Ontologies”
Latifur Khan
In *Proc. of ACM Multimedia*, Vol. 2, Orlando, FL, November 1999 (1999), Page 209 - 210.
225. “Selective Placement and Replication Strategies for Storing Audio Clips in a Naval Application”
Cyrus Shahabi and **Latifur Khan**
In *Proc. of SPIE Multimedia Storage and Archiving Systems III*, Boston, MA, November 1998 (1998), Page 338 - 349.
226. “Run-Time Optimization of Join Queries for Distributed Databases over the Internet”
Cyrus Shahabi, **Latifur Khan**, Dennis McLeod, and Vishal Shah
In *Proc. of Communication Networks and Distributed Systems Modeling and Simulation (CNDS)*, San Francisco, CA, January 1998 (1998).
227. “Improving the Precision of Lexicon-to-Ontology Alignment Algorithms”
Latifur Khan and Eduard Hovy
In *Proc. of AMTA/SIG-IL First Workshop on Interlinguas*, San Diego, CA, October 1997 (1997).

Seminars/Talks

- Stanford University, California
- Information Sciences Institute (ISI); USC
- Southern Methodist University (SMU)
- UT Southwestern Medical Center
- *IUPUI : Indiana University-Purdue University Indianapolis*
- National University of Singapore (NUS)
- Nanyang Technical University (NTU), Singapore
- Institute for Infocomm Research (I²R), Singapore
- Singapore Management University, Singapore
- SAP Research Center, Singapore
- UAE University, UAE
- Bangladesh University of Engineering and Technology (BUET)
- USM, Malaysia
- Nokia
- Boeing
- Tektronix
- Alcatel

ADVISOR

Professor Dennis McLeod, Department of Computer Science, School of Engineering, *University of Southern California (USC)*, Los Angeles, California, USA.

ADVISEE

Post-doc:

Dr. Mamoun Awad (2006 - 2007)
Dr. Chuan Li (2006)
Dr. Mohammad Masud (2010 - 2011)

Ph.D. Students

1. Ahmad Mustafa
2. Justin Sahs
3. Vishal Karande
4. Ahsanul Haque
5. Khaled Al-Naami
6. M. Solaimani
7. Swarup Chandra
8. Gbadebo Gbadero Ayoad
9. Maryam Bahjobi Imani

Graduated

Ph.D.

1. Feng Luo (Ph.D. Summer 2004; Dissertation Title: *Mining Gene Microarray Expression Profiles*; currently **Associate Professor (tenured)**, *Clemson University, USA* since January 2006).
2. Mamoun Awad (Ph.D. Fall 2005; Dissertation Title: *Effective Data Mining for Intrusion Detection and WWW Prediction*; currently **Associate Professor**, *University of UAE, Al-Ain*, since September 2006).
3. Lei Wang (Ph.D. Fall 2006; Dissertation Title: *Automatic Image Annotation and Mining*, **Microsoft** at Redmond, USA).
4. Mohammad Mehedy Masud (Received the *Louis Beecherl Jr. Graduate Fellowship* at UTD, Ph.D. Fall 2009; Dissertation Title: “*Adaptive Classification of Scarcely Labeled Evolving Data Stream*”, **Assistant Professor**, *University of UAE, Al-Ain*, since January 2012).
5. Qing Chen (PhD. Fall 2010; Dissertation Title: *Data Stream Classification Techniques for Multiple Novel Classes and Dynamic Feature Spaces*, *Software Development Director*, *China National Petroleum Company (CNPC)*, *Richfit IT LLC*, Beijing, China).

6. Arshad Ul Abedin (co-advised; PhD. Spring 2011; Dissertation Title: *Automatic Cause Identification From Aviation Safety Incident Reports*; Member of Technical Staff, BloomReach, Inc., Mountain View, California).
7. Mohammad Farhan Husain, (co-advised; PhD. Spring 2011; Dissertation Title: *Data Intensive Query Processing for Semantic Web Data Using Hadoop and MapReduce*, Amazon; Seattle, Washington, June 2011)
8. James McGlothlin, (PhD. Fall 2011; Dissertation Title: *Efficient Semantic Web Knowledge Management*; Fusion Consulting, Texas, December 2011)
9. Jeffrey L Partyka, (co-advised; PhD. Fall 2011; Dissertation Title: *Learning-based Geospatial Schema Matching Guided by External Knowledge*, Raytheon (Research), January 2012).
10. Sunitha Ramanujam, (co-advised; PhD. Fall 2011; Dissertation Title: *Toward An Integrated Semantic Web: Interoperability Between Data Model, Citi Bank, Dallas, TX*).
11. Tahseen Al-khateeb, (PhD. Spring 2012; Dissertation Title: *An Effective Evolving Data Stream Classification*, Marketo Inc, San Francisco, California, May 2012).
12. Neda Alipanah, (co-advised; PhD. Spring 2012; Dissertation Title: *Federated Query Processing Using Ontology Structure and Ranking in a Service Oriented Environment*”, *Post-Doctoral Researcher, Division of Biomedical Informatics, University of California, San Diego, June 2012*).
13. Mohammad Salim Ahmed, (PhD. Summer 2012; Dissertation Title: *“Clustering Guided Multi-Label Text Classification”*, Member of Technical Staff, BloomReach, Inc., Mountain View, California).
14. Satyen Abrol (PhD. Spring 2013; Dissertation Title: *Location Mining in Online Social Networks*; Member Technical Staff at VMware, San Francisco, California)
15. Brandon Parker (PhD. Fall 2014; Dissertation Title: *Sluicelox: Semi-Supervised Learning for Labeled Prediction With Concept Evolution and Tracking in Non-Stationary Data Streams*; Senior Member Technical Staff at L3 Communication, Dallas, TX)

M.S.

1. Deshpande, Shruthi Anil (M.S. thesis: *Cluster based phase analysis for server workloads*, Software Engineer, Intel, Oregon).
2. Shagun Jhaver ((M.S. thesis: *Large Scale Data Mining with Applications in Social Computing*, Software Engineer, Amazon, Seattle, Washington)
3. David Brainard Sounthiraraj (M.S. thesis: *Large Scale, Automated Detection of SSL Man-In-the-Middle Vulnerabilities in Android Applications*, CISCO, Austin, TX)
4. Sheikh Muhammad Qumruzzaman (M.S. thesis: *Behavioral pattern prediction for stream-based data*, CISCO, Silicon Valley, California)

5. Jason Switzer, (M.S. Thesis: *Semi-supervised Subjectivity Classification and application to Jargon Heavy Corpora, L3 Communication, Texas*).
6. Korosh Golnabi (“**Get-Doc**” Student, MS Thesis: *Updated Firewall Policy Rules using Association Rule Mining*)
7. Ahmed Bashir (M.S. Thesis: *A Framework for Image Annotation using the Semantic Web*); Manager at Apple Inc, Silicon Valley, California
8. Manish Gupta (M.S. Thesis: *A Distributed For Handling Location Dependent Continuous Queries in Mobile Environment*)
9. Mohammad Mirza (M.S. Thesis: *Data Management in a Disaster Relief Scenario Using Bluetooth*)
10. Casey Breen (M.S.)
11. Rajesh Bhairampally (M.S.)
12. Yan Rao (M.S.)
13. Chowdhury Yeameen, (M.S., Amazon)
14. Greg Hellings (M.S.)

Anson L. Clark Program and PISD/Hi-TECCC Program

1. Ryan A Watts, Summer 2007
2. Shoel Sheikh, Summer 2009
3. Adam Stutsman, Summer 2010
4. Zackary Weger, Summer 2011
5. William Szendrey, Summer 2012
6. Jeffrey Chang, Summer 2012
7. Garrett Greenwood, Summer 2013
8. James Murphy, Summer 2014
9. Asim Siddique, Summer 2015
10. Italo Zevallos, Summer 2016

Research projects for Senior Design

1. Nate Diamond, David Evans, Keith Ripley, Justin Sahs, “Using Machine Learning to Identify Malicious Android Applications,” sponsored by Ball Aerospace, Fall 2011 (**Best project**)
2. Yasser Aboudkhil, Mark Jackson, Lude Jin, Duc Le, Ivan Oropeza, Resource-Constrained Data Mining, sponsored by Ball Aerospace, Spring 2012
3. Charles Smith, Sara Tucker, Michael Johnston, Caleb Dean, Malware Detection using Data Mining, sponsored by Raytheon, Fall 2012

Professional Membership

ACM Life Time Member (**Distinguished Scientists**)

Senior Member, IEEE

Member, SIAM

Prototypes/Tools Developed with Students

1. Data Mining Toolkit for Malware Detection, 2005 – 2010
Mehedy Masud, Latifur Khan, Bhavani Thuraisingham
Developed data mining algorithms using WEKA and other tools to detect buffer overflow, and malicious code.
2. Stream Mining Tools, 2008 – 2010
Mehedy Masud, Latifur Khan, Bhavani Thuraisingham with Jiawei Han et al
Developed a stream mining algorithm for novel class detection. The tool will be distributed for external users.
3. Ontology Alignment in Geospatial Data, 2007 – 2010
Jeff Partyka, Latifur Khan, Bhavani Thuraisingham
Developed ontology alignment algorithms for integrating heterogeneous geospatial database systems. The algorithms were integrated into Intelligence Community's Blackbook.
4. Translators and Mappings from Relational to RDF Data and Vice Versa, 2007 – 2010
Sunitha Sriram, Latifur Khan, Bhavani Thuraisingham
Developed a tool for use by relational database users and RDF users to carry put translations.
5. TweetHood, 2010 – Present
S. Abrol, L. Khan, B. Thuraisingham
Location aware tweet mining
6. Federated Query Processing in Clouds, 2008 – 2010
Farhan Husain, Pankil Doshi, Latifur Khan, Bhavani Thuraisingham
Develop a cloud computing platform with Hadoop and MapReduce and implement secure federated query processing and optimization algorithms on top of this platform.
7. SPARQL Query Optimizer, 2009 – 2010
Farhan Husain, Latifur Khan, Bhavani Thuraisingham
This system is developing a SPARQL query optimizer for the Hadoop/MapReduce framework.
8. DGSOT: Dynamical Growing Self Organizing Tree
Feng Luo, and Latifur Khan
Developed a hierarchical clustering algorithm and tested for Gene expression dataset.

Blackbook Enhancements and GOTS (Government Off the Shelf)

Geospatial Proximity Algorithm, 2008 – 2010

Sonia Chib, Bhavani Thuraisingham, Jyothsna Rachapalli, Latifur Khan

Implemented geospatial proximity algorithms using Google maps for Blackbook users.

Open Source Software at the University of Texas at Dallas

1. SCRUB tool
<http://scrub-tcpdump.sourceforge.net/index.php>
<http://sourceforge.net/projects/scrub-tcpdump/>
2. JENA Contributions, Very Large RDF Graphs
<http://jena.sourceforge.net/contrib/contributions.html>
<http://cs.utdallas.edu/semanticweb/jenaextension.html>

Tool Repositories developed and hosted at UTD

Data Mining Tools

<http://dml.utdallas.edu/Mehedy/>

Semantic Web Tools

<http://cs.utdallas.edu/semanticweb/index.html>

Secure Cloud Repository