A 2-Page Curriculum Vitae

Lawrence Chung

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Appointments:

Associate Professor
 Dept. of Computer Science, The University of Texas at Dallas, 2000-Present
 Dept. of Computer Science, The University of Texas at Dallas, 1994-2000.

Visiting Scholar
 Center for Strategic Technology Research (CSTaR), Andersen Consulting, Summer 1994.

Lecturer Dept. of Computer Science, University of Toronto, 1993-1994.

Education:

Ph.D., Department of Computer Science, University of Toronto, November 1993.
 M.Sc., Department of Computer Science, University of Toronto, March 1984.

B.Sc., Honours Computer Science Specialist in Data Management, University of Toronto, June 1981.

Three most cited publications (on Google Scholar http://scholar.google.com/scholar?q=lawrence+chung&hl=en&lr=):

On non-functional requirements in software engineering

L Chung... - Conceptual Modeling: Foundations and ..., 2009 - Springer Cited by 1870

Representing and using nonfunctional requirements: A process-oriented approach

J Mylopoulos, L Chung... - Software Engineering, IEEE ..., 1992 - ieeexplore.ieee.org Cited by 855

From object-oriented to goal-oriented requirements analysis

J Mylopoulos, L Chung... - Communications of the ACM, 1999 - portal.acm.org Cited by 436

Other selected publications:

Research Monograph:

Lawrence Chung, Brian A. Nixon, Eric Yu and John Mylopoulos, *Non-functional Requirements in Software Engineering*, Kluwer Academic Publishing, 2000. 472 pp. ISBN 0-7923-8666-3.

Edited Volumes (Guest Co-editors):

- *Journal of Systems and Software* 85(3), 2012.
- Science of Computer Programming: 77(1), 2012; 75(8), 2010; 66(1), 2007; 61(1), 2006; 57(1), July 2005.
- *Journal of Systems Architecture:* **50**(7), July 2004.
- Computer Standards & Interfaces (CS&I): **25**(3), 2003.

Refereed Journal /Conference/Workshop Papers:

- S. Supakkul and L. Chung, "The RE-Tools: A multi-notational requirements modeling toolkit," 20th IEEE Int. Conf. n Requirements Engineering (RE 2012). Pp. 333-334.
- L. Chung, T. Hill, O. Legunsen, Z. Sun, A. Dsouza and S. Supakkul, "A goal-oriented simulation approach for obtaining good private cloud-based system architectures," *Journal of Systems and Software*, In Press. http://dx.doi.org/10.1016/j.jss.2012.10.028.
- T. Ruiz-Lôpez, M. Noguera, M. J. Rodríguez, J. L. Garrido and L. Chung, "REUBI: A Requirements Engineering method for ubiquitous systems," *Science of Computer Programming*, In Press. http://dx.doi.org/10.1016/j.scico.2012.07.021.
- H. Wang, R. Mehta, L. Chung, S. Supakkul, L. Huang, "Rule-based context-aware adaptation: a goal-oriented approach," *Int. J. Pervasive Computing and Communications* 8(3): 279-299 (2012).
- L. Chung, S. Supakkul, N. Subramanian, J.L. Garrido, M. Noguera, M.V. Hurtado, M.L. Rodrguez, and K. Benghazi, "Goal-Oriented Software Architecting," In P. Avgeriou, J. Grundy, J. G. Hall, P. Lago and I. Mistrik (eds.), *Relating Software Requirements and Architectures*: 91-109, Springer-Verlag. 2011.
- M. Noguera, M. V. Hurtado, M. L. Rodriguez, L. Chung and J. L. Garrido, Ontology-driven Analysis of UML-Based Collaborative Processes using OWL-DL and CPN, *Journal of Science of Computer Programming (JSCP)*: 75(8), 2010.

- pp. 726-760.
- L. Chung and N. Subramanian, "Adaptable Architecture Generation for Embedded Systems," *Special Issue on Computer Systems, Journal of Systems and Software*, **71**(3), 2004. pp. 271-295.
- S. Supakkul, T. Hill, L. Chung, T. Tun, J. Leite, "An NFR Pattern Approach to Dealing with NFRs," *Proc.* 18th IEEE Int. Conf. on Requirements Engineering (RE'10). pp. 179-188.
- T. Hill, S. Supakkul and L. Chung, "Run-time Monitoring of System Performance: A Goal-Oriented and System Architecture Simulation Approach", *Proc. 1st Int. Workshop on Requirements@Run.Time (RE@RunTime) at RE'10.* pp. 31-40.
- Tomás Ruiz-López, José Luis Garrido, Kawtar Benghazi and Lawrence Chung, "A Survey on Indoor Positioning Systems: Foreseeing a Quality Design," *Proc. Int. Symp. on Distributed Computing and Artificial Intelligence (DCAI2010), Advances in Soft Computing*, 2010, Vol. 79, Distributed Computing and Artificial Intelligence. pp. 373-380.
- L. Chung, S. Lim, Y. Chung, R. Y. Mehta and A. B. Chembra, "AAC for Elderly People with Hearing, Speech or Memory Loss due to Aging," 25th Annual Int. Technology & Persons with Disabilities Conference, March 2010.
- T. Hill, S. Supakkul and L. Chung: Confirming and Reconfirming Architectural Decisions on Scalability: A Goal-Driven Simulation Approach. IWSSA 2009, OTM Workshops 2009: 327-336.
- E. Oladimeji, S. Supakkul and L. Chung, "Model-Driven Development of Secure Software Architecture," *Int. Conf. on Software and Knowledge Engineering*, Boston, July 2007.
- P. P. Sancho, C. Juiz, R. Puigjaner, L. Chung and N. Subramanian, "An Approach to Ontology-aided Performance Engineering through NFR Framework," *Proc. Int. Workshop on Software Performance (WOSP'07)*, Buenos Aires, Argentina. ACM (Order No. 488073) Feb. 5—8, 2007. pp. 125-128.
- E. Oladimeji, S. Supakkul and L. Chung, "Security Threat Modeling: A Goal-Oriented Approach," *Proc. Int. Conf. on Software Engineering and Applications (SEA'06)*, Dallas, TX, Nov. 2006.
- L. Chung, W, Ma and K. Cooper, "Requirements Elicitation through Model-Driven Evaluation of Software Components," Proc., IEEE Int. Conf. on COTS-Based Systems (ICCBSS'06), Feb. 2006. pp. 187-196.
- L. Chung, X. Franch and N. Maiden, "Models and Processes for the Evaluation of Off-The-Shelf Components MPEC'05", Proc. IEEE Int. Conf. on Software Engineering (ICSE), May, 2005. p. 696.

Keynote & Invited Presentations:

- L. Chung, "Goal-Oriented Requirements Engineering and Software Architecting," 8th ACIS Conference on Software Engineering Research, Management & Applications (SERA 2010), Montreal, Canada. May 24th May 26th.
- Collaborative Ubiquitous Computing: A Goal-Oriented Approach, University of Granada, Spain, May 2009.
- Communication Assistive Technology for Elderly People with Speech or Hearing Loss, UTD-Keimyung U./Daegu City Collaborative Research Initiative on U-health, 2008, The University of Texas at Dallas.
- Communication Assistive Technology for Elderly People in u-City with Hearing, Speech or Memory Loss, Seminar on Improving Quality of Life: Health-IT Integration, Gyungju, Korea, Nov. 2008.

Software Tools:

- RE-Tools: A multi-paradigm modeling tool, supporting a number of prominent notations for functional and non-functional requirements, agents, goals, softgoals, and objects. http://www.utdallas.edu/~supakkul/tools/RE-Tools/index.htm
 To date, 1234 downloads from 65 countries
 http://sourceforge.net/projects/re-tools/files/re-tools/1.2/stats/map?dates=2009-05-26+to+2012-05-07
- HOPE (Helping Our People Easily): A tool for assisting people with special needs, running on a mobile phone (AndroidTM), to help senior people and people with difficulties hearing, speaking, memory loss, and weak muscles. To date, 72 downloads from 8 countries http://utd.edu/~rym071000/index.html
 http://sourceforge.net/projects/hope-android/files/hope.zip/stats/map?dates=2012-05-04+to+2013-09-30
- CAT (COTS-AwareTechniques): An intelligent, knowledge-based tool for developing software systems using Commercial-Off-The-Shelf (COTS) system components. http://www.utdallas.edu/~chung/CAT/index.htm
- Silverlining: A systems of systems engineering tool, with an emphasis in Cloud simulation and forecasting http://utdallas.edu/~axg118830/silverlining.html

Selected Professional Activities:

- Co-Editor-in-Chief: Int. J. Software Innovation
- Editor: ETRI Journal
- Editorial Board Member
 - Requirements Engineering Journal
- Int. J. Networked and Distributed Computing

- Program Co-Chair (2011-2012)
 - [1st 2nd] Int. Workshop on Requirements Patterns (RP'11 and RP'12) at RE'11 and RE'12
 - [10th 11th] Int. Workshop on System/Software Architectures (IWSSA 2011 and IWSSA 2012)