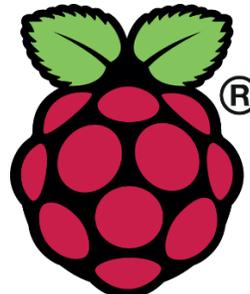
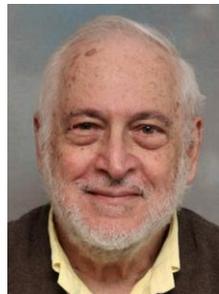




Department of  
**COMPUTER  
SCIENCE**  
THE UNIVERSITY OF TEXAS AT DALLAS

Center for Computer Science Education & Outreach

invites you to explore Raspberry Pi  
with experts during August 12-13 weekend!



Aug 12 9am – 12:30pm	Python Projects with Pi	Prof. John Cole
Aug 12 1 – 4 pm	Assembly Programming with Pi	Dr. Bill Pervin
Aug 13 1-5 pm	Node.JS with Pi	Charath Ranganathan

\$10 for UTD folks, \$25 fee for all guests, Lunch included on Saturday. We prefer you to bring Pi 3 & accessories (details @ [bit.ly/utd-rp-res](http://bit.ly/utd-rp-res)), OR be ready to share our units & accessories with other attendees.

Register @ [bit.ly/csor-rpi](http://bit.ly/csor-rpi) ASAP.

We will close it as soon as the capacity is reached.

Questions? [csk12@utdallas.edu](mailto:csk12@utdallas.edu)

## ***Python Projects with Pi workshop:***

Basics of setting up the Raspberry Pi. Introduction to the Linux command line. Basic Python programming, with a few small projects using Python 3, including using the GPIO pins & a few sensors. Participants should have basic programming skills in C++/Java/Python to benefit from this workshop.

Professor John Cole teaches programming & UI design courses at UT Dallas. He is also industry veteran with 40+ years of software development experience. He loves to tinker with embedded programs, Raspberry Pi, Arduino, and write little Android apps! Read more about him @ [utdallas.edu/~john.cole](http://utdallas.edu/~john.cole)

## ***Assembly Programming with Pi workshop:***

A short introductory tutorial on Raspberry Pi Assembler. Since the Raspberry Pi uses the ARM processor, it is an excellent choice to give high-level language programmers a basis for using assembly language programming along with an introduction to Computer architecture. Participants should be comfortable in programming in Python, C, C++ or Java to benefit from this advanced level workshop.

Dr. Bill Pervin is Professor Emeritus of UT Dallas. He has taught tons of courses in Computer Science, Electrical Engineering & Mathematics for the past 63+ years! Read more about him @ [utdallas.edu/~pervin](http://utdallas.edu/~pervin) His latest book is about Assembly programming with Raspberry Pi.

## ***Node.JS with Raspberry Pi***

Node.js is an ultra-fast JavaScript runtime built on Chrome's V8 JavaScript engine. It uses an event-driven, non-blocking I/O model that makes it perfect for embedded controllers.

Learn how to program the Raspberry Pi with Node.js, including access to GPIO and other sensors. Understand how the event-driven model in node.js makes it easy to rapidly build applications on the Raspberry Pi. See how the inbuilt HTTP stack makes it easy for the Raspberry Pi to act as a web server or as a general purpose network server. Students should have some prior programming experience in a language such as Python or Java. The course will start with a rapid introduction to node.js.

Charath Ranganathan has over 25 years of experience in software development. In his spare time, he enjoys tinkering with embedded controllers such as the Arduino and the Raspberry Pi. In his last company, Charath established an electronics Club, and helped 10 members learn the basics of electronics, and Arduino programming. More details @ [linkedin.com/in/charath](https://www.linkedin.com/in/charath)