

Zhuoqun (Tom) Cheng

CONTACT **Cellphone:** (857)210-7316 **E-mail:** czq@bu.edu
INFORMATION **Homepage:** <http://cs-people.bu.edu/czq/>

EDUCATION **Boston University**, Boston, MA September 2012 - present
PhD Student in Computer Science
• Advisor: Professor Richard West
Zhejiang University, Hangzhou, China September 2008 - June 2012
Bachelor of Engineering in Computer Science

RESEARCH **SmartPrint3D: A Smart 3D Printer Control and Processing System**
PROJECTS *October 2015 - April 2016*
• Ported the **Quest Operating System** to Intel MinnowMAX board, and implemented the GPIO, I2C and NIC driver.
• Developed a framework, on Quest OS, to ease the process of porting Arduino control programs to multi-core embedded platforms.
• Ported Marlin 3D Printer Control Firmware to the above framework (as well as Linux) to run as a user level application to control a Printrbot Simple Metal 3D printer via our custom circuits.
• Implemented a simple web server and job spooler in Quest to allows remote job submission and configuration.

Qduino: A Multithreaded Arduino System for Real-time Applications
January 2014 - January 2015
• Extended Arduino API to support multithreaded sketch w/ timing predictability.
• Implemented the new API library on the **Quest RTOS** on Intel Galileo board and built a prototyping collision-avoidance rover on the new platform.

PUBLICATION **MARACAS: A Real-Time Multicore VCPU Scheduling Framework**
Ying Ye, Richard West, Jingyi Zhang, Zhuoqun Cheng, in Proceedings of the 37th IEEE Real-Time Systems Symposium(RTSS), Porto, Portugal, November 29-December 2, 2016

Qduino: A Multithreaded Arduino System for Embedded Computing
Zhuoqun Cheng, Ye Li, Richard West, in Proceedings of the 36th IEEE Real-Time Systems Symposium (RTSS), San Antonio, Texas, December 1-4 2015.

Predictable Communication and Migration in the Quest-V Separation Kernel

Ye Li, Richard West, Zhuoqun Cheng, Eric Missimer, in Proceedings of the 35th IEEE Real-Time Systems Symposium (RTSS), Rome, Italy, December 2-5 2014.

COLORIS: A Dynamic Cache Partitioning System Using Page Coloring
Ying Ye, Richard West, Zhuoqun Cheng, Ye Li, in Proceedings of the 23rd International Conference on Parallel Architectures and Compilation Techniques (PACT), Edmonton, Alberta, Canada, August 24-27, 2014

WORK
EXPERIENCE

Intern Graduate Sr. Advisor

June 2015 - August 2015

Dell Research, Santa Clara, CA, USA

- Developed a blockchain-based task distribution framework for Internet of Things

Software Engineer Intern

December 2011 - April 2012

Xunjiu Inc., Hangzhou, China

- Developed a lightweight web server in U-boot for router firmware update.