Javad Ebrahimian Amiri

Education

2016–Now **Ph.D. in Computer Science**, Australian National University.

Thesis Topic A Verifiable Foundation for Development of Programming Languages for Real-Time Systems

2011–2013 M.S. in Software Engineering, University of Tehran, Iran, GPA: 17.7/20.

Thesis Topic Resource Management for Accuracy Improvement in Real-Time Systems: A Prototypical Implementation

2006–2011 B.S. in Software Engineering, University of Tehran, Iran.

Career Interests

A practical research or engineering role in:

- o system software, including operating systems, compilers and language runtimes
- o safety-critical embedded systems with real-time requirements
- o emerging many-core and heterogeneous systems

Academic Experience

2017–2018 **Tutor of the Computer Organization and Program Execution course**, *Australian National University*.

2014–2016 Convenor of the Operating Systems Lab, *University of Tehran*.

2012–2016 **Tutor of the Operating Systems course**, *University of Tehran*.

Summer 2015 Co-supervisor of two B.S. Students, *University of Tehran*.

Fall 2015 **Educator of a workshop**, *Title: Conceptual study and preliminary performance evaluation of some RTOSs*, Sharif University of Technology, Tehran, Iran.

Selected Posgraduate Courses

- High-Performance Computing 20/20
- Fault-Tolerant Systems 18.8/20
- Performance Evaluation 18.5/20
- Adv. Operating Systems 17/20
- Multi-Core Embedded Systems 20/20
- Adv. Computer Architecture 18.5/20
- Stochastic RT Systems 18.5/20
- Real-Time Systems 16.5/20

Selected Projects

Rust & C A programming language VM for real-time systems

Porting a programming language VM to Rumprun-seL4

C & ASM Hacking the network interrupt manager in RTEMS RTOS

C++ Adding fault injection and AVF calculation to the GEM5 full-system simulator

C# & Matlab Simulation of a load balancing many-core system employing Model Predictive Control

Technical Skills

Languages

Programming Rust, C/C++, X86 & ARM assembly, Java, C#, Python.

Honors and Awards

Awarded Ph.D. scholarship for international students, Australian National University. Supplementary Ph.D. scholarship, CSIRO Data61 (NICTA).

Ranked 4th among 2000+, Ph.D. in software engineering entrace exam, Iran. 90th among 30000+, M.S. in software engineering entrace exam, Iran. 394th among 200000+, University entrace exam, Iran.

Publications

J. E. Amiri and M. Kargahi. A predictable interrupt management policy for real-time operating systems. In 2015 CSI Symposium on Real-Time and Embedded Systems and Technologies (RTEST), pages 1-8, Oct 2015.