

Javad Ebrahimian Amiri

Canberra, Australia

+61 (4) 6876 4362

✉ javad.amiri@anu.edu.au

🌐 www.linkedin.com/in/javad-amiri/

Education

2016–2020 **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:

- *system software, including operating systems, compilers and language runtimes*
- *safety-critical embedded systems with real-time requirements*
- *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 | ○ Multi-Core Embedded Systems 20/20 |
| ○ Fault-Tolerant Systems 18.8/20 | ○ Adv. Computer Architecture 18.5/20 |
| ○ Performance Evaluation 18.5/20 | ○ Stochastic RT Systems 18.5/20 |
| ○ Adv. Operating Systems 17/20 | ○ 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

Programming Languages **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 entrance exam*, Iran.
 90th among 30000+, *M.S. in software engineering entrance exam*, Iran.
 394th among 200000+, *University entrance 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.