

# Kamyar Mohajerani

Research Assistant

## Interests

- System-on-Chip
- Embedded Systems
- Digital Design
- Low-Power Design
- Electronic Design Automation
- Hardware Accelerators
- Computer Architecture
- Verification
- Open-Source
- Security

## Contact

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## Education

- PhD in Electrical & Computer Engineering . . . . . SEP 2017 – MAY 2022  
George Mason University, Fairfax, VA  
Research: Instruction-Set Extensions and accelerators for post-quantum cryptography
- Master of Science in Computer Architecture . . . . . SEP 2012 – SEP 2016  
University of Tehran, Tehran, Iran  
Thesis: An Action-Oriented Approach to Hardware Description and Synthesis
- Bachelor of Science in Computer Engineering . . . . . SEP 2006 - SEP 2012  
Isfahan University of Technology, Isfahan, Iran

## Experience

- Research Assistant . . . . . JAN 2019 – PRESENT  
Cryptographic Engineering Research Group (CERG)  
George Mason University, Fairfax, VA  
Side-channel resistant hardware implementations of Post-Quantum Crypto schemes
- Teaching Assistant . . . . . AUG 2017 – DEC 2018  
George Mason University, Fairfax, VA  
Digital Design Courses, Digital Lab, Cybersecurity
- Developer . . . . . OCT 2015 – MAY 2016  
Research Institute for Robotics, AI, and Information Science, Tehran, Iran  
Development of embedded monitoring and control unit for data-center HVAC
- Project Lead . . . . . SEP 2014 – OCT 2015  
iWin Eng. Co., Tehran, Iran  
Leading hardware and software development for a Hardware Security Module
- Developer . . . . . MAR 2014 – SEP 2014  
iWin Eng. Co., Tehran, Iran  
Development and verification of Cryptographic IP accelerator cores in Verilog and Chisel  
C++ embedded software stack and PKCS11 client library
- Developer . . . . . MAR 2009 – JAN 2013  
Padid-Avaran Narmafzar Apadana (PANA), Isfahan, Iran  
Linux network kernel module; USB token firmware; high-availability for UTM

## Skills

- |              |                 |
|--------------|-----------------|
| ●●●●○ Rust   | ●●●●● C++       |
| ●●●●● Python | ●●●●○ Scala     |
| ●●●●● VHDL   | ●●●●○ Verilog   |
| ●●●●● Chisel | ●●●○○ Bluespec  |
| ●●●●○ RTOS   | ●●●●○ Compilers |
| ●●●●● FPGA   | ●●●●○ ASIC      |

## References

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