

# FATEME SHOKOUHINIA

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## BASIC INFORMATION

Burnaby, British Columbia, Canada  
fateme\_shokouhinia@sfu.ca  
Website: fshok.github.io

## RESEARCH INTERESTS

Computer Architecture  
Memory Systems  
Processing In Memory  
Reliability and Performance Enhancement in PIM

## EDUCATION

### Ph.D. in Computing Science

Simon Fraser University, BC, Canada  
Supervisor: Professor Alaa Alameldeen

September 2021 – present

### M.Sc. Degree in Computer Systems Architecture

Amirkabir University of Technology, Tehran, Iran  
M.Sc. Research Thesis Title: Reliability improvement in DWM-based caches  
Supervisors: Dr. Hamed Farbeh, Dr. Saadat Pour Mozafari  
Intelligent Computing and Communication Infrastructure (ICCI) Lab

September 2019 – July 2021

### B.Sc. Degree in Computer Engineering

Sharif University of Technology, Tehran, Iran  
B.Sc. Research Thesis Title: Investigating the reliability improvement methods in mixed-critical systems  
Supervisor: Dr. Shaahin Hessabi

September 2014 – February 2019

## QUALIFICATIONS

Programming Languages: C, C++, Python  
Hardware Description Languages: VHDL, Verilog  
Familiar with Simulation tools: Gem5, Ramulator-PIM, ZSim, DAMOV  
Operating Systems: Linux, Windows

## PUBLICATIONS

Meisam Abdollahi, Mohammad Baharloo, Fateme Shokouhinia, and Masoumeh Ebrahimi, 2021, "RAP-NoC: Reliability Assessment of Photonic Network-on-Chips, A simulator". In Proceedings of the Eight Annual ACM International Conference on Nanoscale Computing and Communication (NANOCOM '21). Association for Computing Machinery, New York, NY, USA, Article 16, 1–7. DOI:<https://doi.org/10.1145/3477206.3477455>

Fateme Shokouhinia, Alaa Alameldeen, 2024, "PIM-LVP: Enhancing Performance in Reliable Processing-In-Memory Systems Using Load Value Prediction". Submitted to ASPLOS 2024 (ACM International Conference on Architectural Support for Programming Languages and Operating Systems)

## WORK EXPERIENCE

### Research Assistant

Simon Fraser University, CS Department  
Supervisor: Professor Alaa Alameldeen

September 2021 – present

### Teaching Assistant

Simon Fraser University, CS Department  
CMPT 295 – Introduction to Computer Systems

### Teaching Assistant

Simon Fraser University, CS Department  
CMPT 305 – Computer Simulation and Modelling

### Teaching Assistant

Simon Fraser University, ENSC Department  
ENSC 450 – VLSI Systems Design

## LANGUAGE SKILLS

- English
- Persian

## REFERENCES

Available upon request