Amin Mosayyebzadeh

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Education

2018-Present	PhD, Computer Engineering Boston University Advisor: Dr. Orran Krieger
2015-2018	Master of Science, Computer Science (Systems) University of Rochester
2008-2011	Master of Science, Computer Engineering (Computer Architecture) Sharif University of Technology, Tehran, Iran. Thesis Title: Task Mapping for 3D NoC with Torus Topology
2003-2008	Bachelor of Science, Computer Engineering Amir Kabir University of Technology, Tehran, Iran. Project Title: Implementation of SIP Protocol in Embedded Linux for PowerPC

Honors

- Distinguished Computer Engineering Fellowship, Boston University, 2018

Research Interests

- Cloud Computing
- Distributed Storage Systems
- Distributed Systems
- Operaing Systems, Multicore Processors and Parallel Programming
- Cybersecurity

Current Research

- Distributed Storage Systems, Mass Open Cloud, Boston University, 2018 - present
- Elastic Secure Cloud Infrastructure, Mass Open Cloud, Boston University, 2017 - 2019

Publications

- **A. Mosayyebzadeh**, et al., "Supporting Security Sensitive Tenants in a Bare-Metal Cloud," USENIX Annual Technical Conference (ATC) 2019.

- M. Abdi, **A. Mosayyebzadeh**, Mohammad Hossein Hajkazemi, Ata Turk, Orran Krieger, Peter Desnoyers, "Caching in the Multiverse," 11th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage '19), 2019.

- **A. Mosayyebzadeh** et al., "A Secure Cloud with Minimal Provider Trust", 10th USENIX Workshop on Hot Topics in Cloud Computing (HotCloud '18), 2018

- **A. Mosayyebzadeh**, M. Mehdizadeh, S. Hessabi, "Thermal and Bandwidth aware Task mapping for 3D NoC," Elsevier Computers and Electrical Engineering Journal, 2016

Research Internship

- Mass Open Cloud (MOC), Rafik B. Hariri Institute for Computing and Computational Science & Engineering, Boston University, MA, USA 2017-2018

Research Projects

- Design and developing a Hybrid Cloud Caching System, MOC, BU, 2019 - present
- Modeling and developing a Workload generator for Cloud Storage Systems, MOC, BU, 2020 - present
- Design and developing a Caching System for Analytical Frameworks, MOC, BU, 2019 - present
- Design and developing a prefetching mechanism for distributed storage, MOC, BU, 2018 - 2019
- Developing a elastic secure bare metal cloud architecture and implementing a prototype of it, Mass Open Cloud, BU, 2017 - 2018
- Design and model of a fuzzy logic based system for analyzing thermal and power statistics of nodes on a 3D NoC, VLSI Lab, CE Department, Sharif University of Technology, Tehran, Iran, 2009-2011

Teaching Assistantship

- Cloud Computing, ECE Department, Boston University, Fall 2019 & Spring 2020
- Operating Systems, ECE Department, Boston University, Fall 2018
- Parallel and Distributed Systems, CS Department, University of Rochester, Spring 2017
- Computer Networks, CS Department, University of Rochester, Fall 2016
- Computer Architecture, CE Department, Sharif University of Technology, Spring 2010
- Logic Circuits, CE Department, Sharif University of Technology, Fall 2009

Work Experience

2013- SAMIM Rayaneh Co., Tehran, Iran
2015   *Embedded Systems Design Engineer*
- Design and development of Linux based OS for an ARM cortex A8 processor based Embedded System
- Developing Linux embedded drivers for Freescale imx6Q processor:
    - 1080P, 720P HD format video interface
    - SPI SLAVE interface
- Design and implementation of an embedded multimedia application
- Design and implementation of an embedded network based monitoring application
    - Socket programming and network programming
    - System programming
    - Firmware programming for communicating with UART, LCD, CAN and SPI interfaces

2012- Danesh Farazan Pardanic Co., Tehran, Iran
2013   *Embedded Systems Design Engineer*
- Development of a Linux OS for an ARM cortex A8 processor (Xilinx DM3730) based Embedded System
- Design and implementation of a Linux embedded driver for Xilinx GPMC bus

2009- SiNA Microelectronics Co., Tehran, Iran
2012   *Hardware and Embedded Systems Design Engineer*
- Linux based system and firmware Programming based on LEON processor
- Design and development of a Linux embedded driver for a hardware based IPSec
- Design, development and implementation of Software for PCI based Embedded Security Systems
- Design and implementation of Firmware for Microcontroller based Embedded System
- Design and development of an ARM based software for configuration of a Software Defined Radio (SDR)
- Design and development of HTML/CGI based Graphical User Interface for a Networking Device

Technical Skills

Programming Languages:	C, C++, Python, HTML, JavaScript
Parallel Programming:	Pthread, MPI, OpenMP, CUDA C
Embedded Processors:	ARM, PowerPC, Spark, GPU
Microcontrollers:	ATMega and ATXmega series
HDLs:	VHDL
LaTeX	