

Reza Karimi

<http://Oxreza.com>

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Address: 400 Dowman Dr #N411, Atlanta, GA 30322

EDUCATION

Emory University , Atlanta, Georgia, United States	2020
Doctor of Philosophy in Computer Science	
<i>Advisor: Ymir Vigfusson</i>	
<i>Research Area: Distributed Systems, Caching Algorithms and Systems.</i>	
Iran University of Science and Technology , Tehran, Iran	2015
Master of Science in Computer Science - Distributed Systems	
<i>Thesis: An Atomic-Multicast Middleware for Mobile Computing Environments.</i>	
University of Isfahan , Isfahan, Iran	2012
Bachelor of Science in Computer Science - Software Engineering	
<i>Project: Design and Implementation of a Task Scheduler for Android OS.</i>	
National Organization for Development of Exceptional Talents , Iran	2008
Middle-school, Highschool, Pre-University Diploma in Mathematics and Physics	

SKILLS

Implementation Skills	Expert in C/C++, Python, Linux Kernel Programming, Network Programming, Shell Script, SQL, Java, PHP, JavaScript, HTML, CSS
Research Experience	Distributed Systems, Caching, Event-Processing

EXPERIENCES

Graduate Research Assistant , SimBioSys Lab, Emory University	Aug 2016 - Present
Research Intern , INESC-ID, Lisbon, Portugal	Summer 2018
Teaching Assistant , Systems Programming, Emory University	Fall 2017
Teaching Assistant , Introduction to Computer Science, Emory University	Fall 2017, Spring 2017
Graduate Research Assistant , Distributed Systems Lab, Iran U of Science and Technology	2012 - 2016
Teaching Assistant , Compilers Design and Implementation, University of Isfahan	Spring 2012
Instructor , Computer Graphics Workshop, University of Isfahan	Spring 2012

NOTABLE PROJECTS

- Bandwidth-aware Caching for Hybrid/NUMA Memory Architectures** Jun 2018 - Present
- A work in progress, aiming to use bandwidth information to achieve efficient cache placement in Hybrid/NUMA memory systems.
- Firehose: Highly Scalable Publish-Subscribe** 2017-2018
- Designed and implemented a scalable, high-throughput and low-latency publish-subscribe platform.
- MimirCache: A Cache Analysis Framework** 2016
- Collaborated in implementation of an integrated cache analysis platform which makes the process of design, development and evaluation of cache policy algorithms faster and more convenient.
- AM2Cast: Atomic-Multicast Middleware for Mobile Computing Environments** 2015
- Designed and implemented an atomic-multicast middleware adapted to characteristics of mobile computing environments providing a robust and easy-to-use messaging platform despite the complexity and unreliable nature of the target environments.

PUBLICATIONS

- J. Yang, R. Karimi, T. Saemundson, A. Wildani, Y. Vigfusson , “Mithril: mining sporadic associations for cache prefetching.” in ACM Symposium on Cloud Computing (SoCC), Santa Clara, CA, USA, 2017.
- J. Yang, R. Karimi, A. Wildani, Y. Vigfusson, “A Simple Cache Prefetching Layer Based on Block Correlation” in USENIX Conference on File and Storage Technologies (FAST), Santa Clara, CA, USA, 2017. [Poster]
- J. Yang, R. Karimi, Y. Vigfusson , “Mithril: Mining block correlation for cache prefetching” in USENIX Symposium on Operating Systems Design and Implementation (OSDI), Savannah, GA, USA, 2016. [Poster]
- R. Karimi, S. Fatholahzadeh, M. Sharifi, A. Paschke, et al., “DEBS2015 Grand Challenge: Parallel Event Processing on Unbound Streams with Multi-Step Windowing,” in ACM Conference on Distributed Event-Based Systems (DEBS), Oslo, Norway, 2015.

HONORS AND AWARDS

- Awarded Research Grant on “Bandwidth-aware Caching in Hybrid/NUMA Systems”** Jun 2018
INESC-ID, Lisbon, Portugal.
- Awarded PhD Scholarship**, Emory University, Atlanta, GA. Aug 2016
- Ranked top 0.2% among participants in nationwide university entrance exam for MSc degree in Computer Science and Software Engineering 2012
- Ranked top 2% among participants in nationwide university entrance exam for BSc degree in Science and Engineering 2008
- Accepted for High School Education in National Organization for Development of Exceptional Talents 2004
- Accepted for Middle School Education in National Organization for Development of Exceptional Talents 2001

COMMUNITY ENGAGEMENT

External Reviewer European Conference on Computer Systems (EuroSys'19), Dresden, Germany.	2018
External Reviewer ACM Symposium on Cloud Computing (SoCC'18), Carlsbad, CA.	2018
Volunteer Instructor, "Unveiling the Internet" Event Atlanta Science Festival, Atlanta, GA.	2018
External Reviewer ACM Symposium on Cloud Computing (SoCC'17), Santa Clara, CA.	2017
Volunteer Instructor, "Unveiling the Internet" Event Atlanta Science Festival, Atlanta, GA.	2017

ADDITIONAL SKILLS AND INTERESTS

Hobbies: Hiking, Biking, Camping, Movies, Photography

Languages: Fluent in *English*, Native in *Persian (Farsi)*, Learning *Spanish and Portuguese*