Research Group Communication Technologies University of Vienna ☑ arash.pourdamghani@univie.ac.at ② pourdamghani.github.io

Arash Pourdamghani

Research Interests

Design and Analysis of Algorithms Decentralized Systems Graph Algorithms

Education

2020-Present University of Vienna, Vienna, Austria.

PhD in Computer Science

2014-2019 Sharif University of Technology, Tehran, Iran.

BSc in Computer Engineering

Experiences

Summer 2018 Researcher, IST Austria, Vienna, Austria, Under the supervision of Prof. Krishnendu Chatterjee.

Summer 2017 **Research Intern**, *Chinese University of Hong Kong*, Hong Kong, China, Under the supervision of Prof. James Cheng.

2016-2017 **Undergraduate Researcher**, *Sharif CE Algorithm Lab*, Tehran, Iran, Under the supervision of Prof. Mohammad Ghodsi.

Summer 2016 **Undergraduate Research Experience**, *Sharif University of Technology*, Tehran, Iran, Under the supervision of Dr.Amin Fazli.

Publications

Hybrid Mining: Exploiting Blockchain's Computational Power for Distributed Problem Solving, with Krishnendu chatterjee and Amir Kafshdar Goharshady.

The 34th ACM Symposium on Applied Computing (SAC 2019)

Probabilistic Smart Contracts: Secure Randomness on the Blockchain, with Krishnendu chatterjee and Amir Kafshdar Goharshady.

The 2019 IEEE International Conference on Blockchain and Cryptocurrency (ICBC 2019)

Fence Insertion in Loop-less Programs, with Mohsen Lesani and Seyed Mohammad Taheri Otaghsara.

33rd International Symposium on Distributed Computing (DISC 2019)

Awards

Spring 2020 Student Travel Grant, ACM SIGAPP for SAC 2019.

Summer 2018 **2-month scholarship**, The Austrian Agency for International Cooperation in Education & Research (OeAD-GmbH).

2014-Present Grant for Undergraduate Studies, Iran's National Elites Foundation.

For outstanding academic success

Fall 2016 Awarded for Success in Studies, Sharif University of Technology.

By the university president

Summer 2013 Silver Medal, Iranian National Olympiad in Informatics(INOI).

Was selected among more than a thousand of Iranian top students

Teaching

2015-2018 **Teaching Assistant**, *Sharif University of Technology*, Tehran, Iran.

Data Structures and Algorithms, Prof.Mohammad Ghodsi (Fall 2016, Fall 2017, Fall 2018)

Algorithms Design and Analysis, Dr.Mohammad Ali Abam (Fall 2018) Data Structures and Algorithms, Dr.Sharareh Alipour (Fall 2018)

Data Structures and Algorithms, Dr.Ali Sharifi Zarchi (Spring 2016, Spring 2017, Spring 2018)

Algorithmic Game Theory, Dr.Masoud Seddighin (Fall 2017)

Algorithms Design and Analysis, Prof.Mohammad Ghodsi (Spring 2017)

2014-2016 Computer Olympiad Teacher, Iranian National Olympiad in Informatics Summer Camp, Tehran,

Iran.

As a part of coding practice sessions team through the summer

2014-2016 Computer Olympiad Teacher, Allameh Tabatabei High School, Tehran, Iran.

Teaching special topics in computer science including Algorithms, Data Structures

Related Courses

Data Structures and Algorithms: (20/20)

Graph Theory: (20/20)

Advanced Programming: (20/20) Software Engineering: (20/20)

Design and Analysis of Algorithms: (19.5/20)

Computer Networks: (18.4/20)

Approximation Algorithms (Graduated Course) : (18.6/20) Randomized Algorithms (Graduated Course) : (18/20) Network Algorithm (Graduated Course) : (20/20)

Skills

Programming JAVA, PYTHON, C++, Solidity

Languages Persian(Native), English(work proficiency)

Voluntary

2018-2019 Co-Founder, TEDxSUT, Tehran, Iran.

2016-2019 Co-Founder, Persian Wikipedia Edit-a-thon, Tehran, Iran.

2016-2018 Co-Organizer, Winter Seminar Series in Advanced Computer Science, Tehran, Iran.

2015-2017 Executive Staff, ACM Asian Regional Contest in Iran, Tehran, Iran.