Hamed Saleh

Department of Computer Science
A.V. Williams Building, University of Maryland
8223 Paint Branch Drive
College Park, MD 20742

Cell Phone: +1 240 513 9872
hameelas@gmail.com
hamed@cs.umd.edu
http://cs.umd.edu/~hamed

Research Interests

- Distributed/Parallel Computing
- Sublinear Algorithms
- Game Theory and Fair Allocation

Education

University of Maryland, College Park, MD. GPA: 3.97/4   2018 - present
Department of Computer Science
Ph.D. in Computer Science, under supervision of Prof. Hajiaghayi
Thesis: Sublinear Algorithms for Processing Massive Datasets

Sharif University of Technology, Tehran, Iran. GPA: 16.57/20   2012 - 2017
Department of Computer Engineering
B.Sc. in Computer Engineering

Publications

Streaming and Massively Parallel Algorithms for Edge Coloring   ESA'19
    DISC'19
*Soheil Behnezhad, Mahsa Derakhshan, MohammadTaghi Hajiaghayi
Marina Knittel, Hamed Saleh*

Externalities and Fairness   WWW'19
Mohammad Ghodsi, Hamed Saleh, Massoud Seddighin

Computational Analyses of the Electoral College: Campaigning is Hard But Approximately Manageable   AAAI'21
Sina Dehghani, Hamed Saleh, Saeed Seddighin, Shang-Hua Teng

Working Papers

Massively Parallel Algorithms for String Matching with Wildcards   submitted
MohammadTaghi HajiAghayi, Hamed Saleh, Saeed Seddighin, Xiaorui Sun
Preprint available at arXiv:1910.11829

Massively Parallel Constant-round Tree Contraction   submitted
MohammadTaghi HajiAghayi, Marina Knittel, Hamed Saleh, Hsin-Hoa Su

Honors and Awards

ACM-ICPC, International Collegiate Programming Contest by ACM.
- **15th Team** in the 39th ACM-ICPC World Finals.   2015
  Marrakech, Morocco
- **27th Team** in the 37th ACM-ICPC World Finals.   2013
  St. Petersburg, Russia
- **1st, 2nd, 1st Team** in Regional Contests of ACM-ICPC West Asia Region, Tehran Site, respectively in 2012, 2013 and 2014.

Awarded University of Maryland **Dean's fellowship** .   2018 - 2019
University of Maryland, College Park, MD

Gold Medal in the 20th Iranian National Olympiad in Informatics.   2010

Awarded as **Outstanding Student** by the university president.   2013
Sharif University of Technology, Tehran, Iran

Recipient of the Grant for Undergraduate Studies.   2012 - 2017
from the Iran's National Elites Foundation, for outstanding academic success.

Work Experience	**Professional Software Engineer**	

- **Software Engineer Intern** at Page Bites Inc.   2020
  Member of the team developing and maintaining
  the instant messenger imo.im.

- **Software Engineer** at Cafe Bazaar Co.   2016 - 2018
  Member of the Search project of Cafe Bazaar, dealing with
  Information Retrieval and Natural Language Processing challenges.

- **Software Engineer** at Lyan Co.   2015
  Started an online marketing platform startup.

- **Android Developer Intern** at Rahnema Co.   2013
  Participant in Rahnema Co. Android Development Camp.

Open Source Software Developer

- tps with Kian Mirjalali   2017
  A command line tool for preparing programming problems.

- site-admin with Mohammad Amin Khashkhashi Moghadam   2017
  A graphical interface for monitoring and managing nodes in a contest hall. [1]

- HelliJudge with Mahrud Sayrafi.   2011
  A programming competition judge with focus on security.

Research Experience

Research Assistant at Algorithms Laboratory   2018 - present
University of Maryland, College Park
Under supervision of Prof. M. HajiAghayi
Working on distributed/massively parallel algorithms for graph/combinatorial problems.

Visiting Graduate Student   2018
Simons Institute for Theory of Computing, Berkeley, CA
Foundations of Data Science program

Undergraduate member of **CE Algorithm Laboratory**   2016 - 2017
Sharif University of Technology
Under supervision of Prof. M. Ghodsi
Working on the problem of fair allocation of indivisible goods

Teaching Experience

Teaching Assistant   2018 - present
University of Maryland, College Park

- Discrete Structures, Spring 2020

- Introduction to Algorithms, Spring 2018, Spring 2019, and Fall 2019

- Introduction to Computer Systems, Fall 2018

---

[1]tps and site-admin are part of IOI 2017 tools developed by the organizing team

Teaching Assistant   2014 - 2016
Sharif University of Technology

- Compiler Design, Spring 2016

- Design and Analysis of Algorithms, Fall 2015 and Spring 2014

- Object Oriented Design, S. Foroughi, Fall 2015

Technical Skills

- **Operating Systems**: Mac, Linux, and Windows.

- **Typesetting**: LaTeX, Microsoft Office, and LibreOffice.

- **Programming Languages**: C/C++, Python, Go, Java, Bash, and MATLAB.

- **Web Technologies**: HTML5, CSS3, Django, node.js, and angularjs.

- **DevOps tools and other**: Docker, Kubernetes, CI tools, Spark, redis, Mongodb, Rabbitmq, Celery.

Other Activities   **External reviewer** for computer science conferences.   2018 - present
COCOON'18, *ISAAC'18*, *WWW'20*, *FSTTCS'20*, and *SODA'21*.

Member of **Scientific Committee** of Programming Competitions   2013 - 2017
Designing contests and authoring problems with algorithmic theme
IOI 2017, ACM-ICPC Regional Contests, INOI, and Sharif AI Challenge

last modified on October, 2020