Majid Daliri

370 Jay St., Brooklyn, NY Floor 11^{th} , Desk A1119

Cell: +1-646-7504667 daliri.majid@nyu.edu majid-daliri.github.io

Education

New York University, New York, USA Ph.D. in Computer Science

2022 - 2027

Advised by Prof. Christopher Musco

University of Tehran, Tehran, Iran

2017 - 2022

Undergraduate student of B.Sc. in **Computer Engineering**

• Cumulative GPA: 3.97/4, in Related Subjects: 4/4

Publications

- Efficient Approximations for Cache-conscious Data Placement (PLDI) 2022 Ali Ahmadi, Majid Daliri, Amir Kafshdar Goharshady, Andreas Pavlogiannis
- A 10-Approximation of the $\frac{\pi}{2}$ -MST (STACS) 2022 Ahmad Biniaz, **Majid Daliri**, AmirHossein Moradpour
- Weighted Minwise Hashing Beats Linear Sketching for Inner Product Estimation (PODS) 2023

 Aline Bessa, Majid Daliri, Juliana Freire, Cameron Musco, Christopher Musco, Aécio Santos, Haoxiang Zhang
- KDEformer: Accelerating Transformers via Kernel Density Estimation (ICML) 2023

Amir Zandieh, Insu Han, Majid Daliri, Amin Karbasi

Research Experience

Research Internship, Simon Fraser University Aug 2021 - Feb 2022 under the supervision of Prof I. Shinkar, I participated in a research internship focusing on the analysis of Boolean functions. Our primary approach involved exploring the Fourier aspects of these functions to gain deeper insights into their behavior and properties.

Online Research Internship, HKUST

Jun 2021 - Jun 2022

under the supervision of Professor A. Goharshady, my project was to design an algorithm to parameterize the cache-conscious data placement and find the exact cache misses or an approximation.

Research Internship, Max-Planck-Institut für Informatik Apr 2021 - Jan 2022 under the supervision of Dr A. Zandieh, the research has focuses on improving the time complexity and reducing the sample counts of the approaches associated with the learning and reconstruction of Fourier of sparse set functions.

Research Internship University of Windsor, Canada Feb 2021 - Feb 2022 Under the supervision of Professor A. Biniaz, working on some computational geometry problems, specifically on topics associated with the Euclidean Minimum Spanning tree.

Awards and Honors

I was awarded the prestigious Hong Kong PhD Fellowship Scheme (HKPFS) scholarship, totaling HK1, 445,200 (approximately US184,100). I was among the top 300 students selected worldwide across all majors, showcasing academic excellence and research potential.

ranked 6^{th} among more than 100 team all around the Iran.

Iranian National Olympiad in Informatics Finalist (IOI national wide) 2016 are awarded to around 50 selected after a year of competition among over 10000 Students.

Teaching

Section Leader for CSCI-UA 310 Basic Algorithms

Spring 2023

Teaching Assistant NYU CS-GY 6763 Algorithmic Machine Learning and Data Science Fall 2022

Work Experience

Software Engineer at Cafebazaar

Summer 2019

Cafebazaar is Iran's leading Android application store, boasting over 50 million users and a diverse array of successful apps.

As a member of the TripPlanner team, I contributed to the development of a comprehensive travel management application. This app offers a suite of services, including expense tracking and personalized destination recommendations, to help users efficiently organize and enjoy their trips.

Junior Software Engineer at Digikala

Jan 2021 - Apr 2021

Digikala is Iran's foremost online platform for product reviews and sales, renowned for its innovative approach and extensive offerings.

As part of the Delivery team, I worked on enhancing and maintaining the delivery services by devising innovative algorithms to address key challenges, such as minimizing delivery times. This optimization process ultimately improved customer satisfaction and strengthened Digikala's position in the market.

Site Reliability Engineer at Sotoon

Oct 2021 - Jun 2022

Sotoon, a privately-held company within the Hezardastan Group, offers advanced Cloud and AI services. Leveraging state-of-the-art technologies, Sotoon delivers exceptional services to its sister companies within the Hezardastan Holding, such as Cafe Bazaar and Divar, two of Iran's most prominent organizations.

As a member of the SPAAS team, I contributed to the development and maintenance of various database and platform services on a Kubernetes-based cloud infrastructure. My responsibilities included expanding our service offerings to encompass additional databases and ensuring the seamless performance of existing services.

Skills and Qualities

Theoretical Background:

Experienced in Design of Algorithms, Data Structures, and Discrete Mathematical fields such as Graph Theory and Combinatorics.

Programming, Scripting, and Web Application Development Skills:

Expert in C/C++, Go, Python, Bash-Scripting, PHP, JavaScript

Comfortable with Django, CSS3 and HTML5. Proficient in git and familiar with many other development tools.

Familiar with different object oriented design patterns and software development methodologies.

Other:

Creative, self-motivated, eager to learn new things. Communicative and collaborative with the ability to work both independently and in a team.