

# Mohammad Matin Najafi

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## EDUCATION

### The University of Hong Kong

Ph.D. of Computer Science

Hong Kong

Expected September 2024

### Sharif University of Technology

Bachelor of Science in Computer Science/Engineering; GPA: 19/20

Tehran, IR

2016-2020

**Relevant Coursework:** Advanced Machine Learning, Advanced Database Management Systems, Applied Artificial Intelligence, Data Mining, Introduction to Data Science

### Allameh Helli High School (National Organization for Development of Exceptional Talents)

High School Diploma in Mathematics & Physics Discipline; GPA: 19.54/20.0

Tehran, IR

2012 - 2016

## SKILLS

- **Languages:** Python, C++, SQL, Java, JavaScript, Matlab, Verilog
- **Tools:** TensorFlow, PyTorch, Scikit-Learn, Numpy, Pandas, Jupyter
- **Databases:** MySQL, Mongo, Redis, Postgres
- **DevOps:** GitHub, CI/CD, Docker, Kubernetes, Ansible, Jenkins
- **CAD:** ModelSim, Quartus II, Proteus

## RESEARCH INTERESTS

- Data Mining
- Graph Mining
- Complex Networks
- Databases
- Knowledge Graphs
- Artificial Intelligence & Deep Learning
- Databases
- Knowledge Graphs
- Artificial Intelligence & Deep Learning

## RESEARCH INTERNSHIPS

### Network Motif Discovery

Summer Research Intern, Dr.Reynold C.K. Cheng

University of Hong Kong, HK

Jul 2019 - Sep 2019

- **Algorithm Design:** Propose and implementation of algorithms to beat the state-of-the-art solutions.
- **Apply "Motif Discovery" to HINs:** Show how motifs can be efficiently discovered on Heterogeneous Information Networks.

### Code Layout Optimization

Summer Research Intern, Dr.Pejman Lotfi-Kamran, Dr. Ali Ansari

Institute For Research In Fundamental Sciences, Iran

Feb 2018 - Apr 2018

- **Background Analysis:** A survey on the existing solutions in the literature.
- **Implementation:** Implementing & Comparing the state-of-the-art solutions to our proposed solution.

## WORK EXPERIENCE

### Cafe Bazaar(Android Market with 40M users)

Software Engineer Intern (Back-end Developer)

Tehran, IR

June 2018 - Aug 2018

- **Mini-inlines:** A platform to respond directly to informative search queries inside the android market.
- **Crawlport:** A crawler to collect and process live data from sport sites.

### Andisheh Group

Software Engineer Intern(Android Developer)

Tehran, IR

May 2017 - Aug 2017

- **Android Development:** Implemented Business Intelligence application.

## PUBLICATIONS

- Two **upcoming** papers on Network Motif Discovery.
- Xiaodong Li, Reynold Cheng, **Matin Najafi**, Kevin Chang, Xiaolin Han, and Hongtai Cao. M-cypher: A gql framework supporting motifs. In *Proceedings of the 29th ACM International Conference on Information & amp; Knowledge Management*, CIKM '20, New York, NY, USA, 2020. Association for Computing Machinery

## HONORS & AWARDS

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- Lee Shau Kee Postgraduate Fellowship. The University of Hong kong 2020
- Belt & Road Scholarship. The University of Hong kong 2020
- HKU Postgraduate Scholarship (PGS). The University of Hong kong 2020
- Academic Excellence Award (rank 1 in class). Sharif University of Technology 2018 & 2019
- MakeAthon(Make Marathon) - Best ideas (**3rd** runner-up)
- Academic Excellence Award (rank 3 in class).Sharif University of Technology 2017
- 2nd runner-up at **Tehran open** chess championship
- **Champion** at **Hong Kong Inter-School** chess championship

## ACADEMIC SERVICE

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### Reviewer / PC Member

#### *Conferences and Journals*

- **SIGMOD 2020**: The ACM Special Interest Group on Management of Data.
- **ACM SIGKDD 2021**: Conference on Knowledge Discovery and Data Mining.
- **TKDE 2021**: IEEE Transactions on Knowledge and Data Engineering

## TEACHING

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### Tutor & Teaching Assistant

*Course: Age of Big Data*

The University of Hong Kong

*Prof. Reynold Cheng*

### Head Teaching Assistant

*Course: Computer Structure & Language*

Sharif University of Technology

*Dr. Hamed Farbeh*

### Tutor & Teaching Assistant

*Course: Software Development and Design(Agile)*

Sharif University of Technology

*Dr. Masoumeh Taromirad*

### Tutor & Teaching Assistant

*Course: Advanced Programming*

Sharif University of Technology

*Dr. Isazadeh*

### Head Teaching Assistant

*Course: Computer Architecture*

Sharif University of Technology

*Dr. Hamed Farbeh*

## LANGUAGE SKILLS

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- **Persian** : Native
- **English**: Fluent (TOEFL 109)
- **Arabic**: Familiar

## SPECIAL COURSES

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- Introduction to **Data Science**: University of Michigan(Coursera)
- Applied **Machine Learning**: University of Michigan(Coursera)
- **Deep Learning** Specialization: DeepLearning.ai (Coursera)

## REFERENCES

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Available upon request.