Mohammad Matin Najafi

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EDUCATION

The University of Hong Kong — Hong Kong
Ph.D. of Computer Science — *Expected September 2024*

Sharif University of Technology — Tehran, IR
Bachelor of Science in Computer Science/Engineering; GPA: 19/20 — *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) — Tehran, IR
High School Diploma in Mathematics & Physics Discipline; GPA: 19.54/20.0 — *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 — University of Hong Kong, HK
Summer Research Intern, Dr.Reynold C.K. Cheng — *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 — Institute For Research In Fundamental Sciences, Iran
Summer Research Intern, Dr.Pejman Lotfi-Kamran, Dr. Ali Ansari — *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) — Tehran, IR
Software Engineer Intern (Back-end Developer) — *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 — Tehran, IR
Software Engineer Intern(Android Developer) — *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

- 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

External Reviewer
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

Tutor & Teaching Assistant   The University of Hong Kong
Course: Age of Big Data   *Prof. Reynold Cheng*

Head Teaching Assistant   Sharif University of Technology
Course: Computer Structure & Language   *Dr. Hamed Farbeh*

Tutor & Teaching Assistant   Sharif University of Technology
Course: Software Development and Design(Agile)   *Dr. Masoumeh Taromirad*

Tutor & Teaching Assistant   Sharif University of Technology
Course: Advanced Programming   *Dr. Isazadeh*

Head Teaching Assistant   Sharif University of Technology
Course: Computer Architecture   *Dr. Hamed Farbeh*

Language Skills

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

Special Courses

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

References

Available upon request.