Mahtab Nejati

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RESEARCH INTERESTS

- Mining Software Repositories
- Data Science for Software Engineering
- Applied Machine Learning
- Natural Language Processing
- Recommender Systems

EDUCATION

Sharif University of Technology (SUT) ⬈   Tehran, Iran
M.Sc. in Software Engineering   September 2019–September 2021 (Expected)
GPA: 20/20 (4/4)

- **Thesis:** "Categorization of Software Repositories in Version Control Systems"
- **Supervisors:** Dr. Abbas Heydarnoori ⬈, Maliheh Izadi ⬈

Khaje Naisr Toosi University of Technology (KNTU) ⬈   Tehran, Iran
B.Sc. in Electrical Engineering, Electronics   September 2010–February 2016
GPA: 15.11/20 , Average GPA of Department: 15.03/20

**Farzanegan Shariyar High School**   Shahriyar, Tehran, Iran
NODET (National Organization for Development of Exceptional Talents)   September 2006–June 2010
Mathematics and Physics

SCHOLARSHIPS AND AWARDS

- Ranked 1st of class 2019 among all M.Sc. students in Sharif University of Technology.   2020

- Admitted to M.Sc. in Software Engineering program in Sharif University of Technology, the **best** university of Iran according to the QS 2021 Ranking. ⬈   2019

- Ranked 12th among approximately 25,000 participants in Iranian University Entrance Exam for Masters degree in Software Engineering.   2019

- Ranked within the top 50% of the graduating class in Khaje Nasir Toosi University of Technology.   2016

- Admitted to Khaje Nasir Toosi University of Technology, one of the top 20 universities (16th) in Iran according to QS 2021 Ranking ⬈ which requires the students to be among top 1% in Iranian University Entrance Exam to get admitted to this university.   2010

- Ranked within the top 0.5% among more than 200,000 participants in Iranian University Entrance Exam for Bachelors degree.   2010

- Ranked 1st of the graduating class in Farzanegan Shahriyar High School.   2010

- Received full scholarship from Farzanegan Shahriyar High School, NODET (Tuition Waiver).   2009

Selected Courses

- **Data Mining:** 20/20
- **Advanced Topics in Software Engineering (Data Science in Software Engineering):** 20/20
- **Software Evolution:** 20/20
- **Software Testing:** 20/20

Other Courses and Certificates

- **Mining Massive Datasets** ⌷
- **Machine Learning** ⌷
- **CCNP Routing & Switching**
- **CCNA Routing & Switching**

Teaching Experience

Sharif University of Technology — Tehran, Iran
Teaching Assistant, Semantic Web (Graduate Course) — September 2020–present

Sharif University of Technology — Tehran, Iran
Teaching Assistant, Database Design and Analysis (Undergraduate Course) — February 2020–July 2020

Danesh English Institute — Andishe, Tehran, Iran
English Instructor (advanced and upper-intermediate level) — September 2015–August 2016

Ghalamchi Educational Institute — Andishe, Tehran, Iran
Tutor — September 2013–August 2015

- High school Mathematics and Geometry for Iranian University Entrance Exam preparation
- High school Physics for Iranian University Entrance Exam preparation
- English for Iranian University Entrance Exam preparation

Khaje Naisr Toosi University of Technology — Tehran, Iran
Teaching Assistant, Differential Equations (Undergraduate Course) — February 2012–July 2012

Parsland English Institute — Andishe, Tehran, Iran
English Instructor (intermediate and beginner level) — January 2008–June 2009

Publications

- A Comprehensive Inventory of Open-source Software Repositories based on Fine-grained Featured Topics
  - In progress for JSS

Research Experience

- A Review on Software Repository Classification, Similar Software Repository Detection, and Software Repository Search Engines

- A Review on Software Repository Tagging and Tag Recommendation in Software Information Sites

- A Review on User Review Analysis in Mobile App Stores

- A Review on Patterns for Self-Adaptive Systems

Professional Experience

Shabake Gostar Shahriyar — Tehran, Iran
NOC Engineer — April 2016–June 2019

Projects

- **User Review Analysis for Release Planning:**
  - A study on user reviews of Duolingo and Rosetta Stone Android applications to extract the bugs reported and the features requested.
- **Sentiment Analysis on User Reviews:**
  - A supervised classification of textual data.
- **A Collaborative Recommender System:**
  - Development of a recommender system that combined item-based and user-based collaborative filtering to recommend music tracks to users.
- **Market Segmentation**
  - Customer behavior analysis on data from Shabake Gostar Shahriyar ISP Company to identify root cause for customer churn.
- **A Search Engine for Persian Text**
  - Development of a similarity-detection system for Persian Wikipedia pages based on various data representation models and similarity metrics in PySpark.
- **An Ontology of Movies**
  - Development of a comprehensive queryable ontology about top 250 movies of all times.

Computer Skills

- **Programming:** Python, GNU Octave, MATLAB
- **Web:** Django, HTML, CSS, JavaScript, BootStrap
- **Tools and Libraries:** PySpark, NumPy, Pandas, Scikit Learn, SciPy
- **DBMS:** PostgreSQL, MySQL, Neo4j
- **OS:** Ubuntu, Windows
- **VCS:** Git
- **Word Processor:** LaTeX

Languages

- **Persian:** Mother tongue
- **English:** Fluent
  - **TOEFL:** 111 (R:28 , L:29 , S:25 , W:29)
  - **GRE:** To be taken at November 16, 2020

References

- **Dr. Abbas Heydarnoori** ⬀
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  - **Phone:** (+98)-21-66166648
- **Maliheh Izadi** ⬀
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  - **Email:** ramsin@sharif.edu
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