

# AFSHIN SHAHRESTANI

## Ferdowsi University of Mashhad (FUM)

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in afshin-shahrestani    🌐 ashthefallen

🔗 <https://ashthefallen.github.io/>

## EXPERIENCE

### Research Assistant

#### IP-PBX Lab (FUM)

📅 December 2020 – Present    📍 Mashhad, Iran

- Research and development of anomaly detection in power consumption data.
- Working with team on design, development of an anomaly detection platform as a service.
- Experience with machine learning, data mining and big data handling.

### Research Assistant

#### SQLab (FUM)

📅 May 2019 - April 2021    📍 Mashhad, Iran

- Research on microservice architecture design patterns and their relation to Object Oriented GoF patterns
- Working with team on design and development of a benchmark for microservice architecture design pattern detection

### Teaching Assistant

#### Ferdowsi University of Mashhad

📅 Fall 2018 - Fall 2020    📍 Mashhad, Iran

- Object Oriented Designs of Systems (Master's class)
- Object Oriented Designs of Systems (Bachelor's class)
- Languages and Machines Theory (5 Classes)
- Data Structures
- Design & Analysis of Software Systems (2 Semesters)
- Software Engineering Lab (2 Semesters)
- Database (2 Classes)

## PUBLICATIONS

### 👥 Conference Proceedings

- Rahimi, Alireza et al. (2021). "Filter Based Time-Series Anomaly Detection in AMI using AI Approaches". In: *5th International Conference on Internet of Things and Applications (IoT 2021), Isfahan, Iran.*

## SKILLS

- Python, C, Java, JavaScript, Dart
- NumPy, Pandas, Keras, NLTK, Transformers, Statsmodels
- PyTorch, TensorFlow, scikit-learn, Pyspark, Matplotlib
- MySQL, MongoDB, SQL Server, SQLite
- Languages: Persian (Native), English (Toefl: 116 (Reading 30 Listening 27 Speaking 29 Writing 30))

## EDUCATION

BCE - 17.31/20 (3.58 GPA)

#### Ferdowsi University of Mashhad

📅 September 2016 – Currently

- Last Semester GPA 19.56 (GPA 4.0)
- Related Courses: Data Mining - Database - Computer Vision - Artificial Intelligence - Computational Intelligence - Information Retrieval

## PROJECTS

### Behanjar - Anomaly Detection in Power Consumption Data

- Developed a platform to detect anomalies in power consumption data of real users created using Python, Spark and Machine Learning

### Multilingual Hate Speech Detection

- Testing different language models and techniques in order to detect hateful language using transformers such as mBERT & XLM-RoBERTa

### Semantic Clustering of Students' research fields

- Clustering university students by their fields and the fields semantic relation to each other

### Analysing E-commerce Website Data

- Preprocessing, clustering and classifying users' and transactions' data on Digikala's dataset for Data Mining course

### Better Exam

- An exam hosting service for the visually impaired built using Azure Cognitive Services' Text-to-Speech and Speech-to-Text, developed for AZURE AI HACKATHON 2021.

## REFEREES

### Prof. Mohammad Hossein Yaghmaee Moghaddam

📍 Computer Eng. Department - FUM

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### Prof. Abbas Rasoolzadegan

📍 Computer Eng. Department - FUM

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### Prof. Faezeh Ensan

📍 Department of Electrical and Computer Engineering - Ryerson University

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