# Mohammad Aminazadeh

B.Sc. in Computer Engineering

github.com/Mohammad-Aminazadeh | Google Scholar

## Education

**University of Isfahan** Isfahan, Iran

B.Sc. in Computer Engineering (Information Technology)

Sept 2016 - Sept 2021

- **GPA:** 3.84 (17.80 out of 20) for the last three years
- Thesis Title: Urban Segmentation and Analysis: Traffic Time Series Clustering and Weather Impact Analysis on Traffic Flows
- **Supervisor:** Dr. Fakhroddin Noorbehbahani
- Relevant Coursework: Final Thesis (19/20) Advanced Programming (20/20) Data Structures (19.80/20) Algorithms Design (17.51/20) -Database Lab (20/20) - MATLAB Workshop (20/20) - Linear Algebra for ML (online)

## Research Interests \_\_

### Data Science - Data Mining - Machine Learning - Human-Centered Computing - Informatics

## Honors\_

- Ranked among the top B.Sc. students of computer engineering major (Faculty of Computer Engineering, University of Isfahan, Isfahan, Iran).
- Ranked among the top 10% of mathematics candidates in the National University Entrance Exam, achieving a position of 1,760 out of 165,000.
- · Ranked among the top students of Mathematics in high school of "Isfahan University of Technology".

## Publications (66 Citations) \_\_\_

### JOURNAL ARTICLES

A systematic review of research on cheating in online exams from 2010 to 2021 Fakhroddin Noorbehbahani, Azadeh Mohammadi, Mohammad Aminazadeh Journal of Education and Information Technologies (Mar. 2022). 2022

7th IEEE International Conference on Internet of Things and Applications, 2023, Isfahan, Iran

#### CONFERENCE PROCEEDINGS

Business Models for the Internet of Things: An In-Depth Categorization, Design and Innovation Tools, Challenges, and Solutions (Submitted) Fakhroddin Noorbehbahani, Mohammad Aminazadeh, Hooman Hoghooghi Esfahani, Soroush Bajoghli

City Intersection Clustering and Analysis Based on Traffic Time Series

Mohammad Aminazadeh, Fakhroddin Noorbehbahani

12th IEEE International Conference on Computer and Knowledge Engineering (ICCKE), 2022, Mashhad, Iran

# **Projects**

## Urban Segmentation and Analysis: Traffic Time Series Clustering and Weather Impact **Analysis on Traffic Flows**

Isfahan, Iran

University of Isfahan (B.Sc. Thesis)

Jan 2022 - Jul 2022

- Supervisor: Dr. Fakhroddin Noorbehbahani
- Technical Fields Involved: Big Data Mining and Analytics Time Series Clustering and Visualization Pattern Recognition Correlation Analysis
- Pre-processing 13 million records of traffic in text-based data sets.
- · Using time series clustering to group intersection data based on similar traffic behavior, aiming to optimize traffic management strategies.
- Discovering traffic flow patterns through time series visualization.
- · Analyzing the correlation between weather conditions and traffic flows by combining weather and traffic data.

#### Financial Data Extraction and Aggregation: Web Scraping using Selenium

Isfahan, Iran

Personal Project

Jun 2022 - Aug 2022

- Technical Fields Involved: Data Extraction Feature Engineering Data Aggregation and Cleaning Statistical Analysis
- Collecting complete financial data from 26,600 public companies, each comprising 356 distinct features.
- Performing feature extraction and quantitative analysis on data.

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Course Projects Isfahan, Iran

University of Isfahan

· Autonomous Maze Navigation System: Implementing an Agent for Solving Maze Puzzles (Artificial Intelligence Project)

- Implementing a Rule-based Agent to Survive in "Wumpus World" Game (Data Structures Project)
- Genetic Algorithm Implementation using MATLAB (MATLAB Workshop Project)
- Implementation of Fundamental Data Structures from Scratch (Advanced Programming Project)

# **Research Experiences**

### **Research Assistant (Volunteer)**

Isfahan, Iran

University of Isfahan

May 2022 - Present

- Supervisor: Dr. Fakhroddin Noorbehbahani
- Department of Computer Engineering

### **Research Assistant (Volunteer)**

Isfahan, Iran

University of Isfahan

Feb 2021 - Dec 2021

- Supervisor: Dr. Fakhroddin Noorbehbahani
- Department of Computer Engineering

## Skills\_

Programming Languages Python, R, SQL

Libraries PyTorch, Scikit-learn, Pandas, NumPy, Selenium, TS-learn

Data Analytic Tools Tableau, Excel

**Soft Skills** Critical Thinking, Creative, Fast Learner, Management and Teamwork Skills

## References\_

• Referee 1: Dr. Fakhroddin Noorbehbahani

**Affiliation:** Assistant Professor at the University of Isfahan

Email: noorbehbahani@eng.ui.ac.ir

• Referee 2: Dr. Azadeh Mohammadi

Affiliation: Assistant Professor at the University of Isfahan

**Email:** az.mohammadi@eng.ui.ac.ir **Gmail:** azade.mohammadi@gmail.com

• Referee 3: Dr. Kamal Jamshidi

Affiliation: Professor at the University of Isfahan

Email: jamshidi@eng.ui.ac.ir

# **Language Proficiency**

**English** IELTS Band Score 7.5 (Listening 8.5 - Reading 7.5 - Writing 7 - Speaking 6.5)

Persian Native proficiency

# **Certificates and Extracurricular Activities**

#### **General Skills of Employment and Entrepreneurship**

Isfahan, Iran

Metaco Training Center

Jan 2022

#### **Fullstack Web Development**

Isfahan, Iran Jan 2019

Metaco Training Center

Tehran, Iran

**Level 3 Swim Coaching**Swimming Federation of Iran

#### **Level 2 Lifeguard Certification**

Tehran, Iran

Life Saving and Diving Federation

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