## **Navid Ashraf**

I am a dedicated and motivated Software Engineer and a recent Master's graduate in Computer Science, with a strong foundation in algorithmic design and machine learning research. My work focuses on developing optimization frameworks and neural network architectures to solve complex real-world problems. I am driven by the potential of algorithmic innovation to transform industries. Eager to bridge theoretical research with practical implementation, my goal is to contribute to the next generation of intelligent systems through scalable, data-driven solutions.

#### **EDUCATION**

Allameh Tabataba'i university, Tehran — Master of Science (MSc), Computer Science, Systems Theory

August 2022 - September 2024

- GPA: 4 (on a 4.0 GPA scale)
- Thesis: An investigation on the performance of recommender systems in a multi task learning model using knowledge graph

**University of Tehran, Tehran** — Bachelor of Engineering (BE), Polymer Engineering, Plastics Engineering

August 2011 - June 2016

• GPA: 2.25 (on a 4.0 GPA scale)

#### **Publications**

# Enhancing Supply Chain Resilience through Advanced Demand Forecasting: Implementation of LSTM Models on Food Demand Data

Navid Ashraf Shokouh Shahbeyk, Hossein Teimoori

 Seventh International Conference on Entrepreneurship for Sustainability & Impact (ESI 2024) - Accepted

# Leveraging Recurrent Neural Networks for Predicting Loan Default: A Dual Approach with and without Uncertainty Considerations

Navid Ashraf Shokouh Shahbeyk, Hossein Teimoori

 Seventh International Conference on Entrepreneurship for Sustainability & Impact (ESI 2024) - Accepted

# Enhancing Retail Market Prediction: An AI-Driven Recommender System for Predicting Consumer Purchase Intentions

Hossein Teimoori, Navid Ashraf, Shokouh Shahbeyk

 Seventh International Conference on Entrepreneurship for Sustainability & Impact (ESI 2024) - Accepted

### Investigating Deep Neural Network Architecture and Feature Extraction Designs for Sensor-based Human Activity Recognition

Danial Ahangarani, Mohammad Shirazi, Navid Ashraf

 Seventh International Conference on Internet of Things and Applications (IoT 2023)

#### **EXPERIENCE**

#### **System Group, Tehran** — Software Engineer

March 2024 - present

- Designed and developed ERP solutions for retail and hypermarkets, translating business requirements into scalable software using C#, ASP.NET, WPF, SQL Server, and MongoDB.
- Modernized legacy systems by refactoring codebases for improved performance and adaptability to evolving business needs, ensuring integration with new modules.
- Built full-stack applications (server/client-side) leveraging DevExpress and Telerik frameworks, optimizing performance for high-traffic retail environments.
- Collaborated with cross-functional teams (QA, product managers) to deliver polished software, exceeding client expectations through iterative feedback and Agile practices.
- Conducted code reviews and troubleshooting, resolving bottlenecks and reducing runtime errors.

# **Allameh Tabataba'i University, Tehran** — Linear Algebra Teaching Assistant

January 2023 - july 2023

- Under the supervision of Professor Hossein Teimoori.
- In this role, I conducted classes to solve example problems. I supervised bachelor students and successfully administered two examinations.

# **Allameh Tabataba'i University, Tehran** — Data structures and Algorithms Teaching Assistant

September 2022 - july 2023

- Under the supervision of Professor Hassan Rashidi.
- In this role, I conducted classes to solve example problems. I supervised bachelor students and graded homework assignments.

#### Nilgam, Tehran – Wordpress Developer

June 2018 - July 2020

 As a WordPress Developer, I specialized in creating and customizing WordPress themes and plugins. I was responsible for developing and maintaining website functionality, ensuring seamless user experiences. Collaborated with cross-functional teams to implement design specifications, troubleshoot issues, and optimize website performance.

#### Nilgam, Tehran - Content Writer

January 2016 - June 2018

• As a Content Writer at Nilgam, I created engaging content for diverse platforms, including websites, blogs, and social media. I conducted thorough research to ensure accuracy and relevance, collaborating with stakeholders to align content with brand messaging and marketing goals. Additionally, I optimized content for SEO to maximize online visibility and enhance audience engagement.

#### Skills

#### Technical Skills:

Python: Proficient

• C#: Proficient

• JavaScript: Advanced

Machine Learning: Advanced

• Deep Learning: Advanced

• Data Visualization: Competent

• Optimization: Competent

Git: CompetentC++: Competent

#### Soft Skills:

- Communication
- Teamwork
- Problem-solving

#### LANGUAGES

- Persian: Native
- English: Full professional proficiency

### **Projects**

- MLP neural network implementation <u>Github link</u>
- Tehran stock exchange market watch crawler Github link
- Telegram bot <u>Github link</u>
- Movie Recommender System <u>Github link</u>

#### Certificates

- Advanced Python, LinkedIn <u>credential</u>
- Quantum computing & programming, Qworld <a href="mailto:credential">credential</a>
- Intermediate Machine Learning, Kaggle credential
- Data Visualization, Kaggle <u>credential</u>
- Intro to SQL, Kaggle <u>credential</u>

### **Honors & Awards**

- Awarded as the Top Student Researcher in the Faculty of Mathematics, Statistics, and Computer Science at Allameh Tabataba'i University for the 2024 Academic Year.
- Ranked 174 among more than 5,000 participants in the nationwide university entrance exam for Computer Science 2021
- Among the top 1% of the participants (+250,000) in the nationwide university entrance exam - 2011

#### Referees

## Professor Hossein Teimoori - Supervisor

- Primary Email: hossein.teimoori@gmail.com
- Secondary Email: hossein.teimoori@atu.ac.ir

### **Professor Shokouh Shahbeyk -** Advisor

• Email: sh\_shahbeyk@atu.ac.ir