Parisa Shahabinejad

linkedin.com/in/parisa-shahabi/
github.com/parissashahabi

prisashahbi@gmail.com
live:.cid.15672503097ec26
+98-9367205062

Research Interests

- Machine Learning
- Artificial Intelligence, Neural Networks
- Computer Vision
- Human-Computer Interaction

Education

University of Isfahan — Isfahan, Iran
B.SC. in Computer Engineering; Overall GPA: 18.04/20.00 — *2019-Present*

Last Semesters' GPA: 20.00/20.00

Related Courses:

- Artificial Intelligence (20/20)
- Data Mining (20/20)
- Data Structures (20/20)
- Object-Oriented Analysis and Design (20/20)
- Software Engineering (19.2/20)
- Principles of Compiler Design (20/20)
- Computer Architecture (19/20)
- Computer Networks (19.2/20)
- Principles of Database Design (19.72/20)
- English for Computer Science and Engineering (20/20)

University of Isfahan — Isfahan, Iran
Minor in Mathematics — *2021-Present*

Related Courses:

- Graph Theory
- Introductory Combinatorics
- Fundamental of Mathematical Sciences
- Linear Programming
- Abstract Algebra

Farzanegan High School — Isfahan, Iran
High School Diploma of Mathematics and Physics; Overall GPA: 19.81/20.00 — *2016-2019*

National Organization for the Development of Exceptional Talents (NODET)

Skills

Programming Languages: Python, C++, JavaScript, and TypeScript

Machine Learning: Familiar with Pandas, NumPy, Scikit-Learn, Matplotlib, and fundamental topics such as Classification, Clustering, Reinforcement Learning, and Neural Networks

Software Engineering: Familiar with software design patterns, SOLID design principles, and software development methodologies such as Agile

Web Development: React, Next.js, JavaScript, HTML, CSS, TypeScript, Redux, Jest, Cypress, Mongoose, Tailwind, Material-UI, Ant Design

Others: SQL, MongoDB, Git, Scrum, Verilog, Object-Oriented Programming, Data Structures

Teaching Experience

Teaching Assistant — University of Isfahan
Computer Architecture, Dr. Zohre Beiki — *Fall 2022*

Teaching Assistant — University of Isfahan
Data Structures, Dr. Reza Ramezani — *Fall 2021*

Teaching Assistant — University of Isfahan
Advanced Programming, Dr. Ahmadreza Montazerolghaem — *Spring 2020*

Teaching Assistant — University of Isfahan
Computer Fundamentals, Dr. Hossein Mahvash — *Fall 2020*

Instructor — Mehregan Workshop
Game Theory — *Spring 2021*

Instructed a junior-level course on game theory

Professional Experience

Ahan Online Tehran, Iran
Junior Frontend Developer *2021-2022*

- Created high-performance reusable components using React, TypeScript, and Next.js with a special focus on code readability and maintainability
- Worked on multiple projects, improved and converted over 50% of the codebase to React components
- Collaborated with a cross-functional team of 20 people, including backend developers, UI/UX designers, and product owners to implement new features and systems within an agile environment

Mehregan Workshop Isfahan, Iran
Frontend Developer *2020-2021*

- Developed Interkarsolar website using React and Material-UI
- Created the logic of fun algorithmic games using JavaScript

Academic Course Projects

Artificial Intelligence Course Project: Developed multiple reinforcement learning algorithms, including Value-Iteration and Q-Learning, to operate on a custom 2D grid world Markov Decision Process, resembling a Pac-man game. Additionally, implemented the Mini-Max algorithm in this environment. Conducted exploratory data analysis (EDA), pre-processing of various datasets, and created prediction models using a range of algorithms including Linear Regression, Logistic Regression, and Multilayer Perceptron (MLP). Also, constructed clustering models utilizing the k-means algorithm. Implemented common path-planning algorithms including search-based techniques such as A*, Dijkstra, and bidirectional search.

Software Engineering Course Project: Designed and developed Heifes, an e-commerce website utilizing Next.js, which connects customers with stores possessing excess unsold food. To ensure adherence to software engineering principles, the project was managed using the Scrum framework, and all essential UML diagrams, including DCD and sequence diagrams, were fully crafted. Tested the website's functionality and reliability by conducting over 15 test cases with Jest, resulting in an overall coverage rate of 60%, and utilized Cypress to compose four integration test scenarios.

Computer Architecture Course Project: Designed a 16-bit RISC processor based on the MIPS architecture, utilizing the Logisim digital logic simulator, capable of executing 15 distinct operations on 16-bit data. Developed a custom assembler and assembly language for the processor using C++. Implemented the processor using Verilog and tested the entire system with a variety of mathematical problems, including the computation of the Fibonacci sequence.

Compiler Design Course Project: Designed a mini-C compiler utilizing Lex and Yacc for the purpose of translating C code into a machine-readable format. Implemented both the Lexical Analyzer and the Lexical Parser.

Database Lab Course Project: Designed and developed Tumblrite, a photo-based social network platform, closely resembling Tumblr, leveraging MongoDB as the primary database technology. Implemented two robust applications with a Model-View-Controller (MVC) architecture: one with C# and MongoDB, and the other with Python and SQLite, both supporting Create, Read, Update, and Delete (CRUD) operations.

Language Proficiency

Persian: Native

English: Fluent

Academic References

Prof. AA Isfahan, Iran
Associate Professor, Computer Eng. Dept., University of Isfahan *AA@gmail.com*

Prof. BB Isfahan, Iran
Associate Professor, Computer Eng. Dept., University of Isfahan *BB@gmail.com*