# Niloufar **Motamedi**

COMPUTER SCIENCE STUDENT AT AMIRKABIR UNIVERSITY

*Tehran, Iran*

✉ niloufarmotamedi04@gmail.com | ⌨ niloufarmtd | in niloufar-motamedi-1b538026a

## Education

**Amirkabir University of Technology (Tehran Polytechnic)**                    *Tehran, Iran*
B.SC. IN COMPUTER SCIENCE                                                      *2022 - Present*

## Skills

| | |
|---:|:---|
| **Programming** | Python, C++, SQL |
| **Web Development** | HTML, CSS |
| **Networking** | TCP/IP, Routing, Switching, Network Security |
| **Tools & Technologies** | Git, Linux, Wireshark, Cisco Packet Tracer |
| **Languages** | Persian (Native), English (Intermediate) |

## Experience

**Bank Mellat**                                                                *Tehran, Iran*
INTERN                                                                         *July - August - 2025*

- Gained hands-on experience with financial systems and banking operations
- Learned basic financial concepts and their implementation in software systems
- Participated in system analysis and documentation processes

## Relevant Courses

| | |
|---:|:---|
| **Core Courses** | Data Structures, Algorithms, Computer Networks, Operating Systems, Software Engineering, Web Programming |
| **Technical Certifications** | CompTIA Network+, Cisco CCNA |

## Certificates

**CompTIA Network+**

CANDO ACADEMY

- Certificate of completion for core networking concepts
- Covered network infrastructure, operations, security, and troubleshooting

**Cisco CCNA**

CANDO ACADEMY

- Practical knowledge of routing, switching, and networking fundamentals
- Hands-on experience with network configuration and troubleshooting

## Projects

**Python, PyGame, AI Algorithms**

OTHELLO GAME AI

- Implemented Othello AI with Minimax, Expectimax, and MCTS algorithms
- Developed PyGame GUI with weighted board evaluation system
- Created multiple AI vs AI game modes for algorithm comparison
- **Technologies:** Python, PyGame, AI Search Algorithms
- **GitHub:** github.com/niloufarmtd/Othello-Game

**Python, Tkinter, CSP Algorithms**

SKYSCRAPER PUZZLE SOLVER

- Built constraint satisfaction problem solver for Skyscraper puzzles
- Implemented backtracking with MRV, LCV, and MAC optimizations
- Designed Tkinter GUI with real-time puzzle visualization
- **Technologies:** Python, Tkinter, CSP Algorithms
- **GitHub:** github.com/niloufarmtd/Skyscraper-Puzzle-Solver

**Python, Machine Learning, Data Analysis**

GENETIC ALGORITHM ANALYSIS

- Conducted comparative analysis of Genetic Algorithm vs K-Means clustering
- Implemented advanced outlier detection using Z-score and IQR methods
- Utilized PCA for dimensionality reduction and performance visualization
- **Technologies:** Python, Scikit-learn, Pandas, Matplotlib
- **GitHub:** github.com/niloufarmtd/Genetic-Algorithm

**Python, Machine Learning, Data Science**

## position

Motivated Computer Science student with strong interest in web development, computer networks and programming. Seeking to apply technical skills and knowledge in practical environments while continuing to learn and grow professionally.

Fraud Detection System

- Developed comprehensive fraud detection pipeline using machine learning
- Performed data exploration, preprocessing, and model comparison with LazyPredict
- Achieved high accuracy with LightGBM classifier for fraud classification
- **Technologies:** Python, LightGBM, LazyPredict, Jupyter Notebook
- **GitHub:** github.com/niloufarmtd/Fraud-Detection

## position