

ALI MOBINI

PROFILE

Software Engineer

Fourth year applied computer science student with four years of professional experience developing for Embedded systems, signal processing, algorithms, IoT, Web Application and Android, using a diverse technology stack. With a mixed, strong and unique background in Computer Science, Computer Engineering, and Mechanical Engineering, I am able to understand and contribute to solving problems that cross the boundaries of these disciplines. I am **proactive** and like to take a **systematic** approach. I **communicate** with ease and have interacted with both clients and stakeholders when being responsible for a customer support team. Learning and sharing knowledge is one of my strengths. I am always eager to put my skills to use and I almost never say no when asked for help.

DETAILS

Year of birth: 1996

Location: Enschede, Netherlands

CONTACT

Phone: +31 64 41 88 301

LinkedIn: [linkedin.com/ali-mobini-16700389/](https://www.linkedin.com/in/ali-mobini-16700389/)

GitHub: [Github.com/Alimi00](https://github.com/Alimi00)

Email: alimobinidev@gmail.com

Website: [Mobini.nl](https://mobini.nl)

LANGUAGES

Persian | native

English | Fluent Business Proficient

French | A2 Elementary Proficient

Dutch | A1 Beginner Proficient

EDUCATION

09/2022 - 08/2026 | Bachelor of Applied Computer Science

Saxion University of Applied Sciences | Enschede, Netherlands

Academic Achievement: Propedeuse **summa cum laude** GPA 9/10

Key Projects

- **Autonomous RC Car:** Led a 6-member team to design and deploy an autonomous RC car using microcontrollers (C/C++), LIDAR sensors, and PID control algorithms. Achieved obstacle avoidance, line tracking, and adaptive hill-climbing capabilities with 98% path accuracy.
- **E-commerce Platform:** Engineered a full-stack e-commerce platform (.NET Core, SQL) featuring JWT authentication, dynamic cart management, role-based admin controls, handling 500+ simulated transactions during stress testing.
- **Smart Health Monitoring Wearable:** Co-developed a smart health monitoring wearable (IoT) with seven peers using ESP32 microcontrollers, achieving OTA firmware updates, real-time fall detection (90% accuracy), and biometric data collection (heart rate, temperature).
- **Weather Station IoT Ecosystem:** Built a weather station IoT ecosystem (Python, MQTT, Azure IoT Hub) with six teammates, integrating sensor nodes and an interactive dashboard for real-time environmental analytics metrics.
- **Magnet Placement Robot:** Architected a high-precision magnet placement robot (C++, Python, ANSYS, ROS2) for 8-person multi disciplinary semester project, achieving 0.025mm positional accuracy via physics-based simulations and closed-loop control systems.
- **FPGA-based & Embedded:** Designed Synthesis Model of an ALU, UART protocol, VGA signal using VHDL and a custom Linux kernel driver for hardware-software communication with embedded sensor.

09/2019 - 07/2022 | Bachelor Computer Engineering | (incomplete)

Azad University (IAU) | Arak Iran

Completed 6 of 8 semesters towards Bachelor's degree

- **Developed a compiler** for a procedural programming language from scratch, implementing lexical/syntactic analysis (ANTLR/LEX/YACC), control structures (if-else, loops), arithmetic operations, and symbol table management.
- Engineered 12+ core **algorithms in C** (sorting, graph traversal, dynamic programming) with optimized time/space complexity, achieving 10-20% faster runtime vs. baseline implementations.
- Applied **machine learning foundations** through coursework: **regression, classification, neural networks** (Python), and computer vision concepts.

09/2015 - 08/2019 | Bachelor Mechanical Engineering | (incomplete)

Azad University (IAU) | Arak, Iran

Completed 7 of 8 semesters towards Bachelor's degree

CERTIFICATIONS:

- C# Programming, Tehran Institute of Technology
- Android Pack, Tehran Institute of Technology
- CCNP Switch, Tehran Institute of Technology
- SQL Server 2016 Database Development, Tehran Institute of Technology

SOFT SKILLS

Strong problem solving
Analytical mindset
Self learning
Team player
Stakeholder Management
Strong Communication
Eager to Learn
Collaboration
Adaptability
Attention to Detail
Strong Time Management
Innovative

HOBBIES

Reading
Swimming
Math
Traveling
Gaming
Languages

EXPERIENCE

08/2023 – 08/2025 | Junior researcher (part time)

AMI @ Saxion University | Enschede, Netherlands

- **Geofence Safety Alarm System:** Researched and developed a geofence safety alarm system with **collaboration** by *witteveen+ bos*, improving system efficiency by **30%** using **advanced filtering** and **decision-making algorithms with Python**.
- **Presented:** A probabilistic approach for a robust safety warning system: the GeoSaFence solution at **ICT.OPEN 2025** conference.

06/2019 – 07/2021 | Software Developer

MTN Irancell Arak Service Center | Arak, Iran

- **Automated Accounting Software:** Designed and developed an automated accounting and staff monitoring system in **.Net**, increasing efficiency by 25% and achieving 100% accuracy in financial reporting.
- **Android App Development:** Developed an Android application **integrated** seamlessly with existing software, improving user experience.

04/2017 – 06/2019 | Supervisor & Agent

MTN Irancell Arak Service Center | Arak, Iran

- **Team Management:** Managed and trained a customer service team, increasing efficiency and reducing response time by 30%.
- **Technical Support:** Worked closely with customers to resolve technical issues, maintain data security, and provide system training, achieving a 91% customer satisfaction rating.

TECHNICAL SKILLS

Proficiency Legend: ● = Beginner, ●● = Intermediate, ●●● = Advanced

- Languages: C# (●●●), Python (●●●), C++ (●●), Java (●●), VHDL (●●), JavaScript (●), Shell Script (●), Dart (●), Haskell (●)
- Frameworks: .Net Core (●●●), JDK (●●), PYQT (●●), Flask (●), Django (●), Flutter (●), NumPy (●), Panda (●)
- Databases: MS SQL Server (●●●)
- Platforms: Windows (●●), Linux (●●), Android (●●), Arduino (●●), FPGA altera (●), platform IO (●●), RTOS (●●), Linux Kernel (●), Containerization (●●), Azure (●)
- Tools: Git (●●), MATLAB (●), Quartus (●●), Selenium (●●), cloud deployments (●●), Kubernetes (●), CI/CD (●), ROS 2 (●●), GDB (●), Docker (●)
- Networks: TCP/IP (●●), DHCP (●), VPN (●●)
- Theoretical knowledge: Mathematic (●●●), AI (●), Computer Graphics (●), Physics electricity, Magnetism (●●), GNSS (●●), Kalman Filter (●●), Probability (●●), Decision-making (●●), Computer architecture (●●), Automation (●●●), Agile (●●), Scrum (●●), Image processing (●●), Multi-threaded applications (●●), Signal processing (●), Automation (●●)