

NIHAD MAHARRAMOV

SOFTWARE ENGINEER

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ABOUT ME

Master's student at the National Aviation Academy specializing in low-level AI, embedded systems, and UAV technologies. Skilled in C, C++, and Python, with practical experience developing hardware-software integrated solutions for autonomous and real-time systems. My work focuses on AI-driven robotics, aviation technologies, and advanced embedded architectures. I am committed to contributing to innovative research and industry projects while continuously deepening my expertise in autonomous systems and intelligent avionics.

TOP SKILLS

Embedded Systems Development (C, C++, Python)	Real-time sensor data acquisition & signal processing
Microcontroller Programming (STM32, ESP32, Arduino)	UAV Flight Control & Telemetry Systems
Digital Electronics & PCB Design Principles	Embedded networking: SPI, I ² C, UART, CAN, LoRa

PROFESSIONAL EXPERIENCE

Baku Engineering University University Lecturer

Sep 2025 - Present

<https://beu.edu.az/az/staff/nmaharramov>

Accomplishments:

- Teach advanced Digital Electronics, FPGA/CPLD design, and Microprocessor Architecture with a strong balance of theory and practical laboratory work.
- Guide student research and projects in embedded systems, real-time digital design, and hardware-software co-integration.
- Develop academic materials, lab exercises, and assessment methods that strengthen students' applied engineering and low-level programming skills.

DefTech Azerbaijan Software Engineer

Jul 2025 - Present

<https://deftech.az>

Accomplishments:

- Design and implement software for embedded systems, focusing on RTOS-based solutions, low-level programming, and performance optimization for reliable hardware-software integration.
- Develop AI-driven algorithms and software solutions for autonomous drones and robotics systems, ensuring real-time decision-making and efficient operation.
- Adept at building data acquisition, analysis, and real-time decision-making systems for embedded devices.

Autonomous Systems Laboratory at INHA University Autonomous Systems Engineer

Nov 2024 - May 2025

<https://lics.inha.ac.kr/index.html>

Accomplishments:

- Developing and testing embedded software solutions that work on autonomous systems
- Programming microcontroller-based control algorithms (PID, sensor fusion, etc.)
- Processing sensor data and communicating via serial communication protocols (UART, SPI, I2C)
- Implement and optimize wireless communication protocols, such as LoRa and BLE, for long-range, low-power IoT and embedded systems.

Software Engineer

<https://www.setm.tech>

Accomplishments:

- Proficiency in C++ and Python for developing real-time applications in embedded systems.
- Engineered AI algorithms to enhance the autonomy and decision-making capabilities of robotic systems, improving operational efficiency and adaptability.
- Experience in building scalable server-side applications with a focus on robustness and performance.

Ministry of Science and Education Republic of Azerbaijan

Oct 2022 - Apr 2023

Data Analytics Intern

<https://edu.gov.az/>

Accomplishments:

- Proficient in data analysis and visualization using tools like Matplotlib and Seaborn to create insightful graphs and charts.
- Skilled in performing data preprocessing, cleaning, and transformation to prepare datasets for analysis.

EDUCATION

National Aviation Academy

Aerospace Information Systems

2025 - 2027

INHA University in South Korea

Information and Communication Technologies

2021 - 2025

Baku Engineering University

Information Technologies

2021 - 2025

National Nuclear Research Center of the Republic of Azerbaijan

Nuclear Physics and Radiation Research

2024

Code Academy

Software Development

2023

ACTIVITES & REWARDS

Brand Student

[AzEdu Azerbaijan](#)

Zangazur UAV Gratitude

[National Military Industry of the Future](#)

Coodinator

Google Developer Student Clubs

Microchip Programming Mentor

[BEU ICT Lab Boostcamp 7.0](#)

Electronics Mentor

[BEU ICT Lab Boostcamp 7.0](#)

Encouragement Certificate

[Baykar Technologies](#)

Second Place Winner

[Innovative methods in the development of education](#)

First Place Winner

[Robotex Turkey](#)

First Place Winner

[Robotex Eurasian Championship](#)

Second Place Winner

[Mission:2030 Hackathon SDG](#)

Honorable Mention

Awarded for achievements in the field of education and services to the promotion of the Baku Engineering University.

Certificate of Acknowledge

Awarded for its active participation in the 'Development of Agrarian Innovation and Startup Ecosystem'.