

HIKMETHAN KOLAY

I am a computer engineering student passionate about learning new technologies.

Rize, Türkiye

+90 542 464 5153 Website E-Mail LinkedIn GitHub

EDUCATION

Recep Tayyip Erdoğan University - Rize, Turkey

2022-2027

BSc in Computer Engineering 3.0 / 4.00 (Current GPA)

SKILLS

Technical Skills

- Java
- Junit
- VHDL
- Spring Boot
- JavaScript
- NodeJS
- ExpressJS
- React
- HTML
- CSS
- C
- Gtest
- MySQL

Software's/Tools

- Visual Studio Code
- Visual Studio
- IntelliJ
- GitHub Desktop
- CMake
- Maven
- Docker
- WSL
- Git

Languages

- English: Upper Intermediate
- Turkish : Native

Soft Skills

- Problem Solving: Solved various problems encountered during projects, some lasting days.
- Time Management:
 Managed project
 schedules and ensured
 everything was on time.
- Adaptability: Changed roles and tools according to the needs of the team and project.

WORK EXPERIENCE

Recep Tayyip Erdoğan University, Rize-Turkey

08/2025 - Present

TUBİTAK 1001 Scholarship Project

I am currently working as a research fellow on an Al project supported by TÜBİTAK 1001. Within the project, I am responsible for
data collection, organization, and storage processes. My work focuses on improving data quality, creating data structures suitable for
model training, and developing sustainable data management infrastructures.

02/2025 – 08/2025 **2247-C Intern Researcher Scholarship Program**

As a Research Intern in the 2247-C STAR Program, I am working on an AI research project at Recep Tayyip Erdoğan University. I
contribute to web application design and am solely responsible for backend development using Spring Boot, building APIs and
managing database interactions.

PROJECTS / PAPERS / AWARDS

Recep Tayyip Erdoğan University, Rize-Turkey

08/2024 – 02/2025 Microcontroller Design

- Designed and implemented a low-cost, energy-efficient microcontroller based on **CV32E40P RISC-V core** architecture with optimized hardware-software integration
- Developed RTL design and functional verification using SystemVerilog and VHDL, implementing system components including memory structures, bus matrices, and peripheral units.
- Conducted comprehensive verification using **UVM (Universal Verification Methodology)** with SystemVerilog testbenches and performed **static timing analysis (STA)**.

 Integrated specialized hardware accelerators including LDPC encoder compatible with 5G New Radio standards, reducing processor load and enhancing system efficiency.

08/2024 – 02/2025 **SafeScript**

- Developed a system to evaluate drug suitability, interactions, and compatibility with patient health and allergy history, aiding doctors in prescribing the most appropriate medication.
- Led the backend development using **Node.js with Express.js**, ensuring secure and efficient data processing.
- Worked closely with team members to design a user-friendly frontend with JavaScript, HTML and CSS.
- Qualified for TÜBİTAK 2209-A and participated in the finals of Teknofest 2024 for the Technology for Humanity category.

EXTRA CURRICULAR ACTIVITIES

2023- present Recep Tayyip Erdoğan University – Society of Computer Engineers

2024- present Recep Tayyip Erdoğan University – Society of Artificial Intelligence and Cyber Security

(Board Member since 2025)