

Selim Berk Altay

Computer Engineering Senior Student | Backend & Systems Enthusiast

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PROFESSIONAL SUMMARY

Senior Computer Engineering student at **TED University** (GPA: 3.19) with hands-on experience in backend development, database optimization, and system architecture. Successfully delivered engineering solutions at VakifBank and developed automated trading systems. Passionate about FinTech and DevOps. Seeking a role in **Backend Development** or **Embedded Systems**, eager to build high-performance software solutions that integrate robust architecture with physical hardware constraints.

EDUCATION

TED University

B.Sc. in Computer Engineering

Ankara, TR

Sep 2022 – Jan 2027 (Expected)

- **GPA:** 3.19 / 4.00 (100% Scholarship)
- **Certifications:** Software Engineering Specialization (HKUST - Coursera) – *Top 5% in Cohort*
- Relevant Coursework: Implementation and Testing (88%), Modeling Software Systems using UML (94%), Software Design and Project Management (86%).

TECHNICAL SKILLS

Languages: Python, Java, SQL, JavaScript, C/C++, SystemVerilog

Backend & Web: Flask, Next.js, REST APIs, HTML5, CSS3, Tailwind CSS

Data & Database: MySQL, PostgreSQL, Firebase, Pine Script

Tools & DevOps: Docker, Proxmox, Git/GitHub, Linux (Ubuntu), Wireshark, IntelliJ

PROFESSIONAL EXPERIENCE

VakifBank

Istanbul, TR (Hybrid)

Intern Computer Engineer

Jan 2025 – Feb 2025

- Maintained and optimized core banking modules using **Python** and **MySQL**, ensuring high data integrity.
- Designed complex SQL queries for financial data analysis, reducing reporting generation time.
- Participated in daily Scrum meetings and utilized Agile methodologies for efficient task management.
- Conducted unit testing and debugging to improve code reliability and minimize deployment errors.

KEY PROJECTS

Homelab & Self-Hosted Infrastructure | *Proxmox, Docker, Linux, Networking*

- Architected a private cloud server using **Proxmox VE**, hosting multiple VMs for development environments.
- Orchestrated containerized applications (Media Servers, File Management) using **Docker** and **Coolify**.
- Configured **Tailscale** for secure remote access and managed internal network routing.

Algorithmic Crypto Trading Platform | *Python, Flask, Binance API, MySQL*

- Engineered a high-frequency trading bot using **Binance API**, automating buy/sell orders based on technical indicators.
- Built a **Flask** backend to manage API connections and a **MySQL** database for storing historical trade data.
- Implemented a backtesting engine to simulate strategies by optimizing parameters.
- Integrated websocket technology for real-time data streaming, significantly reducing price tracking latency.

BIST Stock Analysis Tool | *Python, Pine Script, TradingView*

- Developed custom analysis scripts for Borsa Istanbul stocks, visualizing market trends with Python data libraries.
- Created proprietary **Pine Script** strategies on TradingView to identify automated entry/exit signals.