

Ege Kaya

egekaya360@gmail.com — linkedin.com/in/ege-kaya — egekaya.dev

SUMMARY

Computer Engineering student with strong experience in full-stack systems, databases, embedded software, and applied machine learning. Co-author of university-level research on large language models in engineering education. Proven ability to build production-grade software, developer tools, and automation with measurable real-world impact.

EXPERIENCE

Front-End Developer Intern

Sep 2025 – Present

Parma Calcio 1913

- Built and deployed 20+ production full-stack features (React, TypeScript) for 50+ staff, reducing operational workflows by approximately 50%.
- Integrated AWS S3, CDN delivery, and real-time data pipelines; achieved Lighthouse performance scores consistently above 95.

PROJECTS & RESEARCH

GitSimulator — GitKraken Game Jam 2025 (3rd Place)

Python, CI/CD, Software Architecture

- Implemented a Git simulation engine supporting rebase, merge, reset, and cherry-pick with visual commit graphs and conflict prediction.
- Designed a modular architecture with 135+ automated tests and CI/CD; published as an open-source package on PyPI.

CoreMetric — macOS System Monitor

Swift, SwiftUI, Core ML

- Built a privacy-first macOS monitoring app using autoencoder-based anomaly detection optimized for Apple Neural Engine with under 1% CPU overhead.

Evaluating the Pedagogical and Cognitive Impacts of LLMs on Engineering Education

Politecnico di Torino

- Co-authored research on the cognitive and pedagogical impacts of LLM-assisted instruction; co-delivered a university lecture on Computer Architecture.

EDUCATION

B.Sc. in Computer Engineering

Expected 2026

Politecnico di Torino

GPA: 27/30 Full Merit Scholarship (Tuition Exemption, Priority List)

INVOLVEMENT

Full-Stack & Embedded Developer

Feb 2025 – Present

PoliTO Rocket Team

- Developed internal web platforms and automation tools for 150+ members, reducing administrative overhead by 95% and handling 1,000+ daily operations.
- Implemented STM32 flight firmware in C/C++ under real-time and memory constraints; built drivers, watchdogs, and performed SWD debugging.

Database Developer

Feb 2025 – Jul 2025

Team DigiTwin

- Designed and optimized a PostgreSQL database ingesting 50,000+ sensor readings/day; improved query performance by approximately 40%.

SKILLS

Languages: Python, Java, JavaScript/TypeScript, C/C++, Swift, Go, Rust, SQL

Frameworks & Tools: React, Springboot, Next.js, Node.js, PostgreSQL, AWS, Docker, Git, PyTorch, MATLAB

Systems: Linux, Embedded Systems, STM32, CI/CD