

Efe Katircioglu

London, UK • katirciogluEFE04@gmail.com • 07944396395 • [LinkedIn](#) • [Github](#) • [Portfolio](#)

EDUCATION AND QUALIFICATIONS

King's College London, United Kingdom

Sept 2024 - Jun 2027

Bachelor of Science, Computer Science

Relevant modules: Data Structures, Database Systems, Software Engineering, Programming

In Progress: Introduction to AI, Robotics, Programming Language Design, Operating Systems and Concurrency

King's College London, United Kingdom

Sept 2023 - Jun 2024

International Foundation, Computer Science & Mathematics

Graduated with First-Class Honours

RELEVANT WORK EXPERIENCE

King's Labs | Academy Software Engineer

Feb 2025 - Apr 2025

London, United Kingdom

- Architected and deployed a **full-stack Next.js** application, implementing a secure authentication layer using **NextAuth.js** with **Google OAuth** provider.
- Developed a suite of **RESTful API** endpoints for **CRUD** operations on user-specific data models, hosted on a **serverless Neon PostgreSQL** instance to enforce strict multi-tenancy and data isolation. Deployed on **Vercel** for real-time user traffic.

PROJECTS

Vibe Generator | Founder & Software Engineer

Jun 2025 - Sep 2025

- Orchestrated an end-to-end user authentication and authorization flow leveraging the **Spotify OAuth 2.0** framework, implementing **stateless session management** using **JSON Web Tokens** to secure API interactions.
- Engineered a high-throughput data aggregation pipeline in **Node.js**, concurrently ingesting data from over **6+ external music APIs**. Optimized ingestion logic by implementing **parallel asynchronous requests**, boosting data retrieval performance by **23x**.
- Developed a dynamic, responsive frontend using a component-based architecture in **Next.js** and **React** that decreased the **rendering time by 30%**. Deployed the application on **DigitalOcean Cloud Droplet**, utilizing **PM2** as a process manager.

Air Pollution Dashboard | Software Project Leader

Mar 2025 - Apr 2025

- Directed a cross-functional team of four in the end-to-end design and development of a **JavaFX** application to visualize complex environmental data of **5 million records** from 2018-2023.
- Engineered and optimized the data ingestion and cleaning pipeline, which **reduced the processing time** for the entire dataset by **75%** and cut initial **application load time** by **50%**.

CERTIFICATIONS

Web Development Bootcamp – Udemy

Nov 2024 – Jun 2025

- Full-stack Web Developer certification covering the MERN stack (MongoDB, Express.js, React, Node.js).
- Gained proficiency in core technologies including in HTML, CSS, JavaScript, Node.js, React, and PostgreSQL.

TECHNICAL SKILLS

- Programming Languages:** JavaScript, TypeScript, Java, Python, SQL, HTML, CSS
- Frameworks & Libraries:** Next.js, React, Node.js, Express.js, JavaFX, NextAuth.js
- Other Tools:** DigitalOcean, Vercel, PostgreSQL, Neon, Git, GitHub

