Cagan Arda Ozkan

+44 7751 553230 | cagansoftwareengineering@outlook.com | LinkedIn | Portfolio | GitHub

Education

Lancaster University, Lancaster, UK Bachelor of Science in Computer Science

September 2023 – June 2026

Lancaster Royal Grammar School, Lancaster, UK

A Levels: Computer Science, Mathematics, Further Mathematics, Physics September 2021 – June 2023

Experience

Software Engineering Fellow | Headstarter AI (Remote)

June 2024 - August 2024

- Collaborated in cross-functional teams to design and implement AI-driven solutions for commercial clients
- Developed an AI support chatbot for Nike footwear products, integrating natural language understanding to surface tailored recommendations
- Built an Al flashcard generator leveraging NLP models, enabling users to convert arbitrary text into study aids
- Applied Agile methodologies to manage project sprints, refine requirements, and deliver incremental value

Teaching Assistant | Lancaster University, Computer Science Dept.

January 2025 – Present

- Assisted in weekly programming lab sessions for 30+ students, clarifying concepts in Java, Python, and algorithms.
- Guided students through debugging and problem-solving, strengthening understanding of data structures and software design.
- Collaborated with faculty to improve lab materials, ensuring exercises aligned with lecture content and learning outcomes.

Projects

Portfolio Website (JavaScript, HTML, CSS)

- Created a personal portfolio site to showcase skills, certifications, and projects
- Optimized performance and UX with responsive design and code-splitting

Inventory Tracker Web Application (JavaScript, HTML, CSS)

- Designed and built a dynamic inventory management app with item addition, deletion, and search capabilities
- Implemented client-side state management for seamless user interactions

Dapper (Graph Analysis Tool) (Java)

- Engineered a command-line application that maps and analyzes node-edge relationships in large graphs
- Focused on efficient data structures and graph traversal algorithms to guarantee performance

Online Voting Tool (Python)

- Developed a secure voting management system to facilitate encrypted ballot casting and tallying
- Integrated input validation and audit logging to ensure integrity and transparency

GenFlashcards AI (Next.js, Firebase, Vercel)

- Designed and launched an Al-powered flashcard generator that converts raw study notes into structured decks.
- Deployed on Vercel with real-time sync via Firebase, enabling students to create and share sets instantly.
- Attracted early adoption from peers, demonstrating potential for scalable EdTech solutions.

Mentoro (Next.js, PostgreSQL, Prisma, TypeScript, Stripe)

- Built a full-stack mentorship marketplace connecting students with private tutors; integrated Stripe for secure payments.
- Architected scalable PostgreSQL schema with Prisma ORM, hosted on Neon for remote persistence.
- Implemented booking, reviews, and messaging to simulate production-grade SaaS features.

Technical Skills

Languages: Java, JavaScript, Python, SQL, C, C++, HTML, CSS, TypeScript

Frameworks & Libraries: React, Next.js, Vite.js

Tools & Platforms: Git, GitHub, VS Code, Firebase, Vercel, Neon, Stripe, PostgreSQL, Prisma

Areas of Interest: Full-Stack Development, Blockchain & Web3, Virtual Reality