David Culemann

(+44)7402099676 davidculemann@gmail.com ◆ Cambridge

EDUCATION

University of Cambridge

Cambridge, UK

MPhil in Energy Technologies - High Performance

Oct. 2020 - Sep. 2021

• Co-founder of a social enterprise, winning £2,000 funding from the 2021 Parmee Prize for Entrepreneurship.

University of Southampton

Southampton, UK

MEng Mechanical Engineering with Sustainable Energy Systems - 1st Class Honours

Sep. 2015 - Jul. 2020

✓/> TECHNICAL KNOWLEDGE

Frontend: TypeScript, JavaScript, React, Remix, Next, CSS, Tailwind, TanStack Query, Cypress, Figma, Cytoscape.js Backend: Firebase, Supabase, Node, Express, PostgreSQL, GitLab CI



♣ Industrial Experience

Cambridge, UK Darktrace

Senior Software Engineer

September 2024 - Present

- Interviewed, onboarded, and mentored 6 developers, fostering growth through pair programming, code reviews, and domain ownership; trusted to support UI and fullstack recruitment across R&D teams.
- Leading efforts to break up the monolithic codebase into reusable UI views such as a reporting dashboard and advanced query page, using micro frontends and NPM packages, saving months of dev time.

June 2022 - September 2024

- Lead UI developer for Darktrace / CLOUD, the company's new flagship cloud security product, coordinating a small team of two developers and a designer and shaping the API with the backend team.
- Developed interactive diagrams with Cytoscape.js to map cloud architectures, highlight high-risk attack paths, and guide security workflows, informed by feedback from stakeholders such as internal security and early adopters.
- Maintaining an internal UI component library imported 600+ times across more than 10 products to promote brand design consistency and accelerating development by minimizing code duplication.
- Championed various developer experience improvements, including automating build deployment to internal test environments through GitLab CI, centralised Prettier rules, and TanStack Query for async state management, gaining buy-in from the team by delivering an ongoing series of talks and documenting the transition plan.

Carno Cambridge, UK

Founding Engineer

January 2022 - April 2022

- Founding full-stack engineer at a startup aiming to accelerate domestic decarbonisation by simplifying and optimising heat pump installation and sourcing with a mobile surveying application.
- Built the MVP app using a modern stack consisting of a **React Native** and **TypeScript** frontend, a **Node.js** + Express back-end, and Firebase for the database, analytics, and authentication.
- Improved code base quality by introducing CI/CD pipelines covering linting, code formatting, automated testing using **Jest** and **Cypress**, and maintaining in-line and wiki documentation.

London, UK Academy

Trainee Software Engineer

August 2021 - January 2022

Founding scholar of a selective holistic training programme covering full-stack technologies and leadership.

Rolls-Royce Motor Cars

Chichester, UK

Computer-Aided Quality Systems Intern

September 2017 - September 2018

• Digitalised the tool tracking process (VBA), resulting in annual savings of ~£10,000 and mitigating quality risks.

• Projects

Corpify | https://remix-shadon-boilerplate.vercel.app/

Remix, Supabase, Shadon, Tailwind

• An open-source boilerplate for quickly launching SaaS applications with **Remix**, **Supabase** and **Shadcn**.

LovebotAI | https://lovebot-ai.vercel.app/

React, MongoDB, Stripe, OpenAI

• A mobile-first web-app for generating dating app profiles with AI, featuring a token monetization system.

GeoGenius | https://geogenius.vercel.app/

React, TypeScript, Figma, Firebase, Express

A quiz app inspired by my love of geography, designed in Figma and implemented an auth flow with Firebase.