DANIEL HUMPHRIES

WWW.AUFBAU.IO // DAN@AUFBAU.IO Haggerston ♦ London ♦ UK

PROFILE SUMMARY

Fullstack software engineer. Specialised in creative and technical engineering. Ethical and sustainable roles only.

TOOLS & TECHNOLOGIES

Software & Tools Language: Python // JavaScript // Rust // Haskell // SQL // C/C++

Front-end: Svelte // React // Vue // Three JS // WebGL // WebGPU Back-end: Supabase // Flask // Docker // PostgreSQL // MongoDB Full-stack: GCP // AWS // Linux // GraphQL // Blender // PyTorch

PROFESSIONAL EXPERIENCE

Aufbau October 2022 - Present

Founder // Web Engineer (Freelance) London, UK

· Creative Web Engineering // WebGL Specialist // Bespoke Websites, Systems, & Apps - from scratch.

· Tech Stack: SvelteKit // Three JS // Supabase // Rust // WebGL // Web GPU

VSProwess January 2023 - Present London, UK

Graphics Engineer (Contract)

· Building a bespoke 3d data renderer in Rust/C++. Rendering 1e6 - 1e9 voxels simultaneously and interactively.

· Tech Stack: C++ // WebGPU // Dawn

Midnight Studio

March 2022 - September 2022

London, UK

Senior Fullstack Engineer (Contract)

- · Senior Fullstack engineer within a digital product agency. Autonomous position among technical leads.
- · Tech Stack: Svelte // React // Three JS // Next // Vercel // Docker // CMS

Hexis November 2021 - February 2022

Senior Fullstack Engineer (Contract)

London, UK

- · Fullstack developer. Contracted to take start-up from prototype to app store release. Scoped, hired, and led a team (react native developer and junior developer) to deliver a robust and scalable application within 4 months.
- · Tech Stack: React Native // Next // GCP // Apollo // GraphQL // Docker // Firebase

Kubrick Group

November 2018 - August 2021

Machine Learning Engineer

Reading, UK

- · Engineer and co-architect on a microservice based data network & machine learning platform. Bespoke system enabled large multinational to run machine learning models on data assets stored across continents.
- · Tech Stack: Python // Vue // Flask // Celery // Docker // PostgreSQL // MongoDB // CUDA // Linux

EDUCATION

University College London

September 2014 - May 2018

MSci Neuroscience

MA Philosophy

London, UK

- · Course of study focused on Computational Neuroscience and Dynamical Systems.
- · Masters Dissertation: 'Dendritic Spine Stability during Regulative Homeostasis' with Prof Tara Keck
- · Bachelors Dissertation: 'Neural Oscillatory Rhythms: Physics & Function' with Dr Lorenzo Fabrizi

Kings College London

September 2021 - September 2022

London, UK

- · Course of study focused on Kant, Mind, Communication, and Representation.
- · Masters Dissertation: 'Carving the Mind at its Joints' with Prof Bill Brewer

RESEARCH

University College London

 $Research\ Assistant$

October 2022 - Present London, UK

- · Working with Dr Daniel Bush and Prof. Neil Burgess on topics in spatial representation and neuroinformatics.
- · Building a real-time, closed-loop stimulation system for manipulating Sharp-Wave Ripples in human subjects.

University of Liverpool

Fullstack Engineer // Research Assistant

July 2021 - Present Oxford, UK

- · Creating a mental state tracking tool with Prof. Dan Joyce, a computational and clinical psychiatrist.
- · Lightweight and customisable tool to facilitate psychiatric research on the dynamics of mental state over time.

OTHER

Bartlett School of Architecture

July 2021 - September 2022

London, UK

Computational Soul: Guest Seminar

- · Invited to run guest seminar on 'computational soul' as part of the Xalon Digital-Communities lecture series.
- · Discussed the notions of soul and representation in objects, and what it takes to synthesise 'computational soul'.

Raumen Bar August 2022 - Present

London Space and Representation Reading Group

London, UK

- · Articles and research on space, action, and representation across neuroscience, philosophy, and mathematics.
- · Members from UCL, Gatbsy, SWC, KCL. Always open to new members, reach out !!