Greg Stretton

Please visit https://cv.gregstretton.org for more information! greg.stretton@protonmail.com https://github.com/gkstretton

I love building end-to-end systems that create value. I seek to be on the cutting edge of the integration of emerging technology and automation.

Experience

Dexory - Senior Software Engineer

Working in the platform team on the backend systems enabling the DexoryView automated warehouse data intelligence product. We write the software that other teams in the company use to manage the robots as we scale to many deployments across the world. Go, React.

Karakuri - Software Engineer

Go + React TS full-stack development for the /FRYR210 automated frying system. On-prem and cloud microservices in Golang, enabling IoT system with remote configuration and updates. 'Tunr', a local configuration frontend for Fryr. gRPC, MQTT, Docker + compose, AWS. Also built simulator of the embedded system for backend use.

Lake Parime - Software Engineer

Design and implementation of various Go gRPC micro-services and frontend interfaces in Svelte. Including ownership of the environmental control system software on a modular data-centre, building simulations, and software to interface with power distribution units and HPC equipment. Incident handling, requirements writing, documentation, and cross-team communication.

APMG - ML Engineer (CyberFirst)

Cleaning datasets and training models; building visualisations and automation; helping the business with multi-label text classification.

Projects

A Study of Light - Mech./Electrical/Software Engineer $May \ 2022 - Now$ Solo art project using milk, food dye and detergent. Design and implementation of mechanical, electrical, software, and social systems. Working to automate all processes. Please see on Youtube! Including public-facing remote-control web interface in React with WebRTC and MQTT over websockets. Automated recording and video editing pipeline in Go + Python.

Founder of sensory augmentation startup

Development of a sensory augmentation device to enable the perception of Earth's magnetic field. Hardware and software engineer, including PCB design and writing inertial measurement unit firmware. Awarded cash prize from a Durham enterprise competition.

MEng IMU Body Tracking Research Project October 2020 - May 2021 Self-proposed an inertial measurement unit body tracking system: ideation, quaternion-based algorithm, system architecture, PCB design, firmware, visualisation, report writing & presentation.

October 2019 - May 2020 BSc Segmentation of Root Images Project Conducted research project to identify structures and properties of plant root systems using machine learning. Handled and augmented dataset. Implemented semantic segmentation algorithm with PyTorch.

August 2022 – July 2023

August 2023 - Now

January 2020 - May 2021

June 2019 – August 2019

July 2021 – August 2022

Education

MEng Computer Science - Durham University	2017 - 2021
$First\ Class\ Honours$ – Broad education. Completed two independent research projects.	
Sixth Form and Secondary	2010 - 2017
A-Level – A*AAA Mathematics, Further Mathematics, Computer Science, Physics.	
$\mathbf{GCSE} - 6\mathbf{A}^*$, 3A in Science, Maths, English and others.	

Skills and Interests

Software – Go, Typescript / React, Embedded C/C++, Python, Vim/BASH, git, Linux.
Hardware – PCB design, STM32 & Arduino, rapid prototyping, 3D design + printing.
Soft – Public speaking. 20-21 Durham Meditation Society president.
Interests – Natural sciences; decentralisation; space industrialisation; self-replicating systems.
Hobbies – Swimming, cycling, running (triathlon); making milk art with a robot.