★ BENSON CHOW ★

SOFTWARE DEVELOPER & TECHNOLOGY ENTHUSIAST

∮ github.com/bensonchow123

♦ MISSION SUMMARY ♦

Passionate problem solver with a focus in computer science. Specialising in software development, 3D printing, high-fidelity audio systems, GNU/ Linux and creating innovative technical solutions. Interested in full-stack development with a focus on user-centric applications and system optimization protocols.

♦ WORK EXPERIENCE ♦

▶ DATA SCIENCE INTERN

2024, July - September

ARUP

- · Automated processing and formatting of Hong Kong Annual Traffic Census data, reducing manual workload and errors.
- Developed a PyQt6-based Windows application with a user-friendly interface for data input/ selection and tool execution.
- Implemented six specialized tools to convert and validate custom CDL, A/B, COR, and XDT files into standardized Excel reports.
- Leveraged multithreading to maintain responsive UI during intensive data processing tasks.
- · Packaged the application as a standalone .exe using PyInstaller for seamless distribution to non-technical staff.

► SOFTWARE ENGINEERING INTERN

2025, June - July

AI Lab Limited

- Researched the ESP32 micro controller for a teaching curriculum, creating a DIY security camera as a demonstration project.
- Developed multiple web applications using Flask, Python, JavaScript, and HTML.

► SOFTWARE ENGINEERING INTERN

2025, July - Septmber

drow.cloud

- Researched the finetuning of an AI powered optical character recognition program for document scanning.
- Developed a document management system that features vector databases for search, and local Al-driven document analysis, utilizing a GNU/ Linux system with three RTX Ada 5880 GPUs.

Download Internship Certificate

▶ REMOTE SOFTWARE ENGINEER

2025, September - current

drow.cloud

► A-Level 2022 - 2024

Malvern College

Relevant Coursework: Campus Interactive Map

- Developed an interactive campus map using Leaflet.js and satellite imagery to display paths, entrances, parking, and stairs.
- Implemented Dijkstra's Algorithm for shortest path calculation with filters (e.g., avoiding stairs).
- Created an event reporting system with MongoDB, role-based user accounts, and caching for efficient data access.

▶ COMPUTER SCIENCE BACHELOR

2024 - current

University of York

♦ TECHNICAL KNOWLEDGE ♦

▶ PROGRAMMING LANGUAGES

Python Java JavaScript

▶ WEB TECHNOLOGIES

HTML5 CSS3 Jinja2 Flask Bootstrap

▶ DATABASE TECHNOLOGIES

MongoDB SQL

► TOOLS & TECHNOLOGIES

Git GNU/ Linux AWS VS Code

▶ DESIGN & FABRICATION

Fusion 360 3D Printing Blender

► AUDIO & HARDWARE

Audio Engineering Computer Hardware Computer System Building

♦ FEATURED PROJECTS ♦

See more about the projects at my website's projects page.

▶ home IT upgrade

June 2025 - September 2025

Upgrades to my home IT equipment and systems in the summer of 2025

Tags: Hardware, Networking

▶ home 3D printing setup

July 2025 - September 2025

A £290 3D printing setup that can be controlled anywhere in the world.

Tags: 3D printing, Networking

► Malvern Maps

December 2022 - december 2023

An interactive map of Malvern College

Tags: Multi languages, Web Development, Flask

GitHub Repo

▶ Computy the dorm server

January 2025 - May 2025

NAS, media steaming server and general server setup in my Y1 dorm at University of York

Tags: Networking, 3D Printing, Hardware, Python

GitHub Repo

► ATC tools

July 2024 - September 2024

Automated data picking of Hong Kong's Annual Traffic Census

Tags: Python, PyQt, Pandas, Pyinstaller

▶ Dorm 3D Printing setup

October 2024 - April 2025

3D printing setup in my Y1 dorm at University of York

Tags: 3D Printing