Phil Blecher

Email: philipblecher@hotmail.com | Mobile: +44 7472794342 | www.linkedin.com/in/phil-blecher-a653251a8/ |
Github: https://github.com/pilipb | Address: London, UK

SUMMARY

I am a software developer and engineer with an MEng in Engineering Design from the **University of Bristol** and a year and a half of experience in various industries including engineering consultancy, robotics and mobile app software development. I am seeking a **Software Engineer role,** to work on developing excellent production code, applying engineering problem-solving to software and creating novel AI applications and integrations**.**

EXPERIENCE

Software Developer and DevOps | Captain App | May 2024 - Current | Bristol, UK

- Led a team of developers in creating lighting controls and asset management apps in the FlutterFire stack.
- Built a linear-based project management tool that integrates LLMs, data analysis and visualisation.
- Built an MVP for a Firebase gift card system, using TypeScript and Flutter.
- Set up company-wide DevOps workflow, Github CI/CD including custom Firebase deployment pipelines.

Robotic Software Developer | Perceptual Robotics | June 2023 - August 2023 | Bristol, UK

- Developed a new path-finding optimisation algorithm for wind turbine nacelle inspection that was tested in with hardware and software-in-the-loop ROS and deployed in test flight, using Python, C++ and DJI drones**.**
- Participated in fixes to the codebase, implementing, testing and deploying fixes to production code.
- Created automation scripts in Bash for SSH connections between drones and ground stations.

EC&I Engineer Intern | Frazer-Nash Consultancy | August 2021 - June 2022 | Bristol, UK

- Designed the PLC software and HMI interface for a shutdown safety system, meeting SIL2 criteria.
- Produced a feasibility study about Fibre Optic Sensing technologies and presented it to senior management of a client firm.

EDUCATION

MEng in Engineering Design | University Of Bristol | **First Class Honours (72%)**, Completed May 2024

- Dissertation on predictive time-series modelling of rivers and pico-scale hydropower output, modelling the energy output and developing a financial model based on the ARIMA prediction. Also developed a hydrokinetic model of a turbine and used Python optimisation packages to recommend changes to the design.
- Multiple units on optimisation for transport, simulation and AI contexts, including a paper optimising the transport plan for Euro2028 using integer linear programming in Matlab.
- Modules: Optimisation, AI, Robotic Systems, Transport Modelling, Scientific Computing

EXTRACURRICULAR ACTIVITIES & PROJECTS

- **Deployed a web app (soon to be IOS)** using FlutterFire stack and backend functions integrating with CLIP by OpenAI.
- **Developed the MVP** for an optimised path planning tool for sustainable forestry using satellite imagery: Canopy Guide.
- Founded and managed a maths tutoring company with **over 20 students and 5 tutors for over 4 years.**
- **Designed, built and coded** a CNC pen plotter designed in Fusion360, and based on Arduino.
- Computer vision projects using OpenCV (CV2) including an interactive signature app.
- Developed portfolio website using **ReactJS.**

SKILLS & CERTIFICATES

- **Proficient Coding Languages:** Python, Typescript, Dart, Matlab, C++
- **Skills:** Linear Programming/Global Algorithms, Numpy, Scipy, Pandas, Scikit, Tensorflow, OpenCV, Git, ROS, GCP/Firebase.

References Available on Request