JAKE STUCHBURY-WASS

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EDUCATION

10. 2021– 06.2025 (EXP) **UNIVERSITY OF CAMBRIDGE – MRes AND PhD (CDT) IN SENSOR TECHNOLGIES AND APPLICATIONS**

- EPRSC Studentship
- MRes project – Mobile systems group, Cambridge Computer Lab in collaboration with Nokia Bell Labs. Project was on extraction of vital signs from audio data on a large dataset. The project will continue with classification techniques such as SVM and MLP.
- PhD – Mobile systems group: Using lightweight ML to extract healthcare data using sensor fusion. We will also investigate federated learning strategies on mobile systems.

10. 2017 – 06.2021 **UNIVERSITY OF CAMBRIDGE – MEng, BA ENGINEERING (INFOMRATION AND COMPUTER ENGINEERING)**

- Class II:1 – Overall including a I in the final year research project
- Final year research project developing new aerodynamic measurement methods for track cyclists. The project involved creating simulations in python, running experiments at the National Cycling Centre and performing data analysis
- Relevant Courses: Deep learning and structured data, probabilistic machine learning, Computer systems, Embedded systems, Inference, Signals and Systems.

EXPERIENCE

07.2020 – 10.2020 **TECHNICAL CONSULTANT – BRITISH CYCLING**

- Running experiments and performing data analysis on large datasets generated.

07.2020 – 10.2020 **UNDERGRADUATE RESEARCHER – BRITISH CYCLING**

- Developing distributed sensor system to gather data.

06.2019 – 09.2019 **UNDERGRADUATE RESEARCHER - UNIVERSITY OF CAMBRIDGE, TRANSPORT RESEARCH GROUP**

- Developing embedded systems to work to display messages to HGV drivers with information from a central server sent over 3G.

06.2018 – 08.2018 **AESSEAL ENGINEERING INTERN**

- Designing mechanical parts on CAD software.

SKILLS

Programming – I have experience with MATLAB, Python, C and C++ languages. Familiar ML toolkits include, PyTorch and Keras. Experienced with Pandas and time series analysis on MATLAB.

Embedded Systems - I have done projects within and outside of university courses on embedded systems including Arduino, Raspberry Pi and ARM boards. An example project is a lightweight facial recognition system. Also, includes familiarity with designing and prototyping electronic circuits and FPGA boards.

Website Management and Design – I manage the University cycling club website, the largest sports club at Cambridge University. Also designed and documented a secured members area on the website. As well as this I maintain the Trinity Hall Boat Club website.

Teaching – I have four years' experience in tutoring students, taking on A-level students as well as students aiming to enter high-level universities.