SAM HUTTON

EDUCATION

University of Cambridge - Selwyn College

September 2021 - June 2025

BA Hons. in Physical Natural Sciences (Earth Sciences)

MSci in Quantitative Climate and Environmental Science (Department of Applied Mathematics) 1st Class

Menlo School - Atherton C.A.

September 2019 - June 2021

AP Exams: Grade 5 in 9 subjects including Physics, Chemistry, Statistics, Computer Science. SAT: 1600.

GPA: 3.98/4.00, 4.49/4.50 Weighted; GCSEs: Grade 9 in 9 subjects, A[^] in Further Maths.

PROJECTS & RESEARCH

coreclean January 2025 - Present

Research Project & Open Source Package

Supervised by Prof. David Hodell

- · Using computer vision and machine learning to segment disturbance out of sediment core images from IODP site U1385. Delivered optimisation by novel algorithmic pre-processing.
- · Implemented U-Net, SegNet and FCN architectures with pytorch. OpenCV used for preprocessing.

Methane and Ion Chemistry in the River Great Ouse

July 2023 - March 2024

Geochemical Field Project

Supervised by Prof. Alexandra Turchyn

- · Fieldwork, collecting water samples from the River Great Ouse and conducted field spectrophotometry, Gran titration, and pH/temperature measures.
- · Analysed samples for dissolved methane and ions in the wet lab. Produced report using QGIS.

Other projects include: Gaussian Plume Simulation for Landfill Emission Reconstruction, Oxford Pets Dataset Image Segmentation, Website for MenloHacks 2021 (a high school hackathon).

EXPERIENCE

Sports Data Labs

July - September 2020

Gungating CA

Web Design Intern

Cupertino, CA

- · Developed a responsive website template using HTML, CSS and react.
- · Learnt use of git for version control; used numpy and matplotlib for data visualisation.

Eurosport International

July - August 2019

Technical Support Intern

Paris, France

· Performed hardware and software support including RAM and GPU swaps, backups, Microsoft Office and Windows setup and troubleshooting.

SOCIAL IMPACT

Cambridge University Students' Union

September 2023 - September 2024

Ethical Affairs Campaign Chair

Cambridge, U.K.

 Led a campaign of 10 committee members and 30+ students while contributing to committees on transport, decarbonisation and accountability. Won the Cambridge Students' Campaign Impact Award.

Teach for Tomorrow July 2020 - September 2024

Co-founder, Organising Committee, Tutor, Web Designer

Menlo Park, CA

- · Co-founded a non-profit organisation providing free online tutoring across the Bay Area. Led a team of 23 tutors providing 500+ hours of tutoring while partnering with other local non-profits.
- · Developed in-house scheduling tools using flask and python.

Other experience as: Hiller Aviation Public Programming Volunteer, Publicity Officer for Cambridge University Quiz Society; Co-president of Cambridge Climate Justice; Chair of the Cambridge University Science Fiction Society.

TECHNICAL SKILLS

Languages Python, Java, MATLAB, JS, HTML, CSS, R

Packages numpy, scipy, pandas, matplotlib, sklearn, tensorflow, pytorch, opency, seaborn, flask

Tools git, conda, QGIS, vim, vscode, paleochrono, LaTeX, Microsoft Power Platform

PERSONAL INFORMATION

Spoken Languages: English, French, Hindi; Residence Status: UK Passport, Based in Cambridge U.K.