Jonathan Buhler

07403111747
benedict.buhler@gmail.com
https://buhler.dev/
Cambridge, UK
GitHub
LinkedIn

Education

University of Edinburgh
(2017 - 2022)
First With Honours
Integrated Masters in Informatics (specialised in AI)

Stuyvesant High School
(2013 - 2017)
NYC Specialized H.S.

Hons. University Marks

5th Year: 76% (US: 4.0)
4th Year: 70% (4.0)
3rd Year: 81% (4.0)

US Exam Scores

SAT: 1540 (out of 1600)
AP Exams (≈ A Levels):
- Calculus BC: 5 (out of 5)
- Computer Science: 5
- English Language: 5
- US History: 5
- European History: 5

Technical Skills

Languages:
- Swift
- Python
- JS/TS
- C++
- Solidity
- Java

Technologies:
- SwiftUI
- TensorFlow
- PyTorch
- OpenCV
- scikit-learn
- Node.js

Interests

- Hiking
- Cognitive Science
- Photography
- Public Speaking
- Reading on rainy days

Profile

Software Engineer and Designer, ex-Apple's Siri team. Masters of Informatics (First with Honours) from the University of Edinburgh. Raised in NYC, fluent in English and German with US, UK, and German citizenship.

Work Experience

Apple (2022-2023)
- Industrial placement as an engineer working on personalising Siri's behaviour for individual users by analysing data streams, detecting error patterns, and injecting pre-emptive fixes
- "Exceeded expectations" in innovation and was praised for proactively establishing cross-team collaborations
- Worked exclusively in Swift and SwiftUI
- Independently prototyped new UI interfaces for existing systems and integrating large language models into our product

Consensys (2018)
- Interned as a software engineer for the Pegasys R&D division
- Worked on EthQL, a GraphQL interface to Ethereum, coded in TypeScript

Projects and Relevant Coursework

AI Safety Research Group, Cambridge Effective Altruism (2022)
- Reading group examining novel AI alignment and robustness research

Masters Project (2021 - 2022)
- Researched the exposure-response relationship between particulate matter in the air and breathing rates
- Used machine learning to predict future breathing rates of subjects given a series of time indexed air quality data points

Honors Project (2020 - 2021)
- Researched how to reproduce human-like behavior in game theory with autonomous agents
- Used reinforcement learning with Python and TensorFlow

Tesco Delivery Slot Detector (2020)
- Built web scraper to monitor Tesco's site for availability
- Made during COVID for my grandparents, emphasised ease of use and reliability

Cryptocurrency Trading Bot (2020)
- Built autonomous trading bot that would scrape price predictions from the web using Puppeteer, then rebalance portfolio using the CCXT library
- Coded in TypeScript, hosted on Raspberry Pi, and run with TS-Node

SpaceX HyperLoop Competition (2019)
- Worked on telemetry for high-velocity pod in yearly SpaceX competitions
- Coded pod communication and modular front-end display in JavaScript and Vue

Formula Student AI Division (2019)
- Worked on the Planning & Control Team designing a self-driving race car
- Researched and implemented intelligent algorithms for yearly competitions

System Design Project (2019)
- Built robot on TurtleBot platform that was capable of accurately returning to station from anywhere in the room, aligning itself, and docking
- Successfully managed team of 10 students

Hack The Burgh - International Hackathon (2019)
- Using TensorFlow and OpenCV, built a smoking detection bot
- Team won the ARM challenge

Google Hash Code (2019)
- Came first in Edinburgh, 239 out of 3000 worldwide