Jonathan Paynter

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Education:

Imperial College London - MEng Electronic and Information Engineering **2018 - present**

- My course explores the spectrum of modern computing topics, including software engineering, digital hardware and architecture design, communication systems and AI.
- Currently studying: Machine/Deep learning, Computer Vision, Robotics, Digital Signal Processing
- Notable 2nd year results: *Computer Architecture* (93), *Digital Electronics* (88), *Software Engineering* (80.5), *Signals and Linear Systems* (80), *Language Processors* (80). Year average: 80.
- 1st Year average: 74

Truro School **2011 - 2018**

- A Levels: *Mathematics*, *Further Maths*, *Physics*, *Chemistry* A*A*A*A; GCSEs: 11A*s

Technical Projects:

- IBM/2nd year architecture project: creating work products for theoretical contact tracing system.
- C subset to MIPS I compiler, and MIPS I emulator, in C++.
- ICHack hackathon: measuring news article novelty and similarity using text embeddings (Universal Sentence Encoder).
- Genetic algorithms for solving the high dimensional case of the game Mastermind.
- 1st year image processing group project: a real-time, FPGA-based snooker table shot trajectory predictor, focusing on optimisation with reference to the specific capabilities of the FPGA.

Work Experience:

Data Analytics Consultant – Mindsheet Ltd. **2020 (1 we.)**

- Aircraft maintenance problem.
- Processing and clustering natural language identifiers.

Software Engineering Intern – ARM **2020 (3 mo.)**

- Contributing to a large Python Github repository, used within the company for test-benching.
- Data driven, iterative process of development, often involving significant investigations into the potential solutions and their consequences.
- Strong focus on clean Git version tree and commits.
- Implementing solutions for an issue within a large, stateful class hierarchy / composition.

'Mission to Mars' Software Cornwall Course **2017**

- Team based Arduino and robotics course with a focus on iterative design.
- Our team won the course competition with the lowest expenses and most accurate robot, replacing the exemplar code provided by Software Cornwall.

Awards:

- 2020 Dean's List for Academic Excellence (top 10% in cohort).
- 2018 Chemistry Olympiad – Silver.
- 2017 Cambridge Chemistry Challenge – Bronze.

Skills and Languages:

- Hardware design using the Vivado software suite, CircuitMaker, Quartus Prime. LabVIEW.
- C++; ARM, MIPS1 instruction set; Python - Numpy, Pandas, SKLearn, Keras; MATLAB; SQL; Prolog; Git.
- German (intermediate).

Other Achievements and Interests:

- Second place in 55mi Ten Tors. **2017**
- Bronze, Silver, Gold Duke of Edinburgh. **2014 - 2017**
- Trumpet grade 6; classical guitar grade 7.
- In my spare time I enjoy running, climbing, swimming and photography.