

# William Profit

3<sup>rd</sup> year MEng Computing  
Imperial College London

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London, UK

## EDUCATION

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- MEng Computing, Imperial College London** **2018 - 2022**
- 1<sup>st</sup> & 2<sup>nd</sup> year: First Class Honours
  - Awarded “Most Interesting Extension” prize and 2<sup>nd</sup> place overall for end of year C ARM11 emulator & assembler project.
- French Scientific Baccalauréat, International Option (OIB)** **2018**
- Overall mark of 17/20
- Cambridge IGCSE** **2015**
- Modules: *English Language (B) and English Literature (A)*

## WORK EXPERIENCE

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- BLOCKCHAIN.COM – Data Science Intern** (London, UK) **Present**
- Now part time after a 3 months internship working as part of the Data Science team, focusing on analytics for user targeting and fraud monitoring. Use of Matomo, Metabase, GCP, Apache Airflow.
- NETCRAFT – Software Engineer Intern** (Bath, UK) **Summer 2019**
- 3 months internship working in cybersecurity, developing admin interfaces and backend systems for malware analysis using Angular, React, Perl, SQL (MariaDB). All work deployed to production.
- AIRBUS** (Toulouse, France) **2015**
- 1-week internship within the Avionics Software department.

## PERSONAL PROJECTS & ACHIEVEMENTS

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- DJStreamr** **Present**
- Launching *djstreamr.com* in the musictech industry, allowing anyone to sync and stream a DJ set live with anyone else in the world. Using AWS, Lambda serverless, Docker microservices.
- Machine Learning Lecturer** **2019**
- Lecturer for Imperial College Data Science Society for student-led Machine Learning evening lectures with 200-300 students. Now elected Head of Talent Development for 2020.
- Computer Vision Chess Player** **2019**
- Use of C and OpenCV to extract state of chessboard from video feed. Then processed by AlphaZero AI on SingularityNET to produce an answer move.
- Winner of Imperial College IC Hack** **2019**
- Team won first prize creating a mobile app for interactive learning using AR. I implemented the networking allowing for communication between devices held by the tutor and the tutees.
- Huawei Deep Learning Team Competition** **2018**
- Implemented a deep fully convolutional residual neural network to denoise images using Python and Keras. Overcame challenge of training on very big data such as 4k images.
- MNIST Handwritten Digit Classifier** **2018**
- Written in C++ with Eigen (Linear Algebra library), implements Backpropagation and Stochastic Gradient Descent. Gradually expanding project into small deep learning library.
- Interpreted Scripting Language** **2016**
- Written in pure C++ and used to interface with C++ applications without having to recompile.
- Terrain Generation** **2015**
- Use of Simplex Noise, Perlin Noise and C++ with OpenGL to procedurally generate 3D terrains.

## TECHNICAL EXPERIENCE

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- Programming Languages: C/C++, Python, Java, Kotlin, Haskell, Rust, HTML, JS/TS, CSS, Perl, SQL
- Python Libraries: PyTorch, Keras, TensorFlow, Scikit-learn, Numpy
- C++ Libraries: OpenGL, Eigen, SFML, SDL, Vulkan
- JavaScript: Vue, Angular, React, RESTful APIs with JWT
- Cloud computing: AWS (Lambda, Cognito, DynamoDB, S3, CloudFront)