+447762026703 **Clovis PJ** cgp4417@ic.ac.uk

Education

Imperial College London (Final year) Sept 2017 - (June 2021)
Mathematics & Computer Science, MEng. Year 4 of 4
- **1st** class (**75%** avg.). Y2 & 3: **Dean's List Award**
- Architecture, ML & computer vision, embedded systems, applied mathematics
- Strong technical group project work (OS, Compilers, WebApp, Embedded Sys.)

Oundle School Sept 2012 - June 2016
A*A*A*A - Maths, Further Maths, Physics, Chemistry
7 A* 2 A 1 B - GCSE/IGCSE

Skills

Highly Skilled at: **C++, C, Python, Java, Javascript, React**
Confidence with: **Angular, Haskell, Mathematica, Assembly, Prolog**
Other Technical Skills: **Architecture, Linux/GNU, Git, Electronics, Vim**

Experience

Google / Project Zero March - Sept 2020
- Security Engineering for Chrome, libFuzzer/LPM fuzzing for sandbox escapes.
- C++ threading, lifetime, memory management, IPC in a mature codebase.
- Understanding security tricks, exploits, methodologies used in 0-day.

Space Magnetometer Laboratory July - Sept 2019
- Built a real-time graph interface for an in-house magnetometer. Python (PyQt)
- Designing a concurrent interface. Handling user & hardware driven events.
- Programming embedded systems, hardware. For ESA mission to Jupiter's moons

Cavendish Laboratory Aug 2015
- Building apparatus, electronics, and programming robotics for scientific research
- Detecting cosmic rays, prove quantum mechanical double slit experiment.

British Geological Survey Jul 2015
- Testing and interfacing seismometers, using Python and Raspberry Pi
- Making instructional information for schools, and educational purposes

Wolfram Research Aug 2014
- Working on a large project of exemplar programming snippets
- Using and learning a pre-released version of Mathematica

Projects

IC Hack 19 *(devpost.com/software/air-palette)* Jan 2019
- Best game, team of 3 Hackathon winner, using computer vision, machine learning
- Using a Microsoft kinect. Hand-tracking to draw, to play pictionary against ANN

Windfall *(github.com/ClovisPJ/Windfall)* Sept 2018
- Fluid dynamics simulation based on an approximation of Navier-Stokes.
- Implementing accurate physics using ball joints. In Processing/Java.

CanSat *(github.com/ClovisPJ/cansat)* 2016
- Building a free falling 'can satellite'. Software for team project.
- C & Intel Edison. Embedded systems programming (I2C, SPI, UART).
- Duplex error correcting comms. Kalman filter (all from scratch).

Seismometer Project *(pi-seis.blogspot.com)* March 2015
- Programming (Python) a seismometer interface. Using an ADC and a
- Raspberry Pi. Documented for use as a teaching resource

Non-Technical Experience

Waitrose & Partners Sept - March 2016/17
Pimlico Connection Tutoring Nov - March 2018/19
- Lead tutor for a group of 5 volunteer tutors, teaching maths A-level