

Aditya Rajagopal

07482923392, ar4414@ic.ac.uk,

12 Franklin Square, West Kensington, London W14 9UU

<https://adityarajagopal.github.io/>

www.linkedin.com/in/aditya-rajagopal-b7b37511b

Education

Imperial College, London

Oct 2014 – Jun 2018

Year 4 MEng Electronic and Information Engineering

Third Year : 1st class honours, **80.2%**

Second Year: 1st class honours, **84.2%**, Dean's List – 1st in the year

First Year: 1st class honours, **82.3%**, Dean's List – 2nd in the year

- Head of Department Prize for Second Year Electronic and Information Engineering

Dr.Pillai Global Academy, Navi Mumbai, India

Aug 2012 – Aug 2014

Cambridge International A-Levels

A-levels – 5 A*s – Physics, Chemistry, Biology, Mathematics, Further Mathematics

- Achieved highest mark in India for AS-levels Physics, Chemistry and A-levels Physics, Chemistry, Further Mathematics

Work Experience

Embedded Software and Hardware Intern, Schlumberger, Norway

April 2017 – Sep 2017

- Worked for 6 months as part of a small marine seismic acquisition technology development team
- Designed a PCB using KiCad to test the functionality of an SFP under vibration
- Validated and verified the SFP by performing the vibration tests
- Evaluated the feasibility of using a MicroBlaze softcore processor on a Xilinx Zynq SoC for sensor data acquisition
- Compiled a design document detailing the pros and cons as well as the workflow to implement a MicroBlaze based design
- Successfully integrated and tested third party IP on an FPGA, tackling issues involving GTX transceivers as well as failed timing constraints due to large clock networks

Undergraduate Research Opportunity, Imperial College London

July 2016 – Sep 2016

- Researched self-organising community energy systems under Professor Jeremy Pitt of the Intelligent Systems and Networks research group
- Acquired transferable technical skills including, low-level and multithreaded programming using python on a Raspberry-Pi, iOS app development in Objective-C and hosting a web-server using Java,

Finoux Solutions, Mumbai

July 2015 – Aug 2015

- Developed commercial stock trading software using JavaScript and Python
- Employed MVC-format of structuring code, tested various no-SQL databases, and programmed both front-end (UX) and backend operations

Skills

Technical: C, C++, Python, MATLAB, C#, R, VHDL, Verilog HDL, Xilinx Vivado, Altera Quartus, Objective-C, Java, JavaScript, Altium CircuitMaker, ARM and MIPS Assembly, LabView, KiCad, LtSpice

Languages: English(native), Tamil(fluent), Hindi(fluent), German(conversational)

Positions of Responsibility

President and co-founder of GameDev Society, Imperial

Oct 2015 –

- Founded the society to generate interest in coding and develop computer games simultaneously
- Coached new members in C# to help learn Unity, the platform used to create the games
- Coordinated between teams of coders and animators to bring together a successful final product
- Organised social events such as an evening of gaming, food and drinks to break the ice between team members

Undergraduate Teaching Assistant for Year 1 Computing Laboratory, Imperial

Oct 2016 -

- Assist the professor in teaching first year undergraduate students, various fundamental concepts in C++

Projects and Achievements

Machine Learning Projects

Jan 2017 – Mar 2017

- Explored, both theoretically and practically, various machine learning concepts as part of a 3rd year module. The projects covered topics ranging from perceptron algorithms to support vector machines (more details at adityarajagopal.github.io)

Built a compiler for the C-language

Jan 2016 – Mar 2016

- Successfully compiled and generated working MIPS assembly for integer arithmetic operations, nested for and while loops, conditional statements, function calls (including recursion), arrays and pointers, strings, and scopes

MIPS CPU Emulator

Oct 2015

- Created a MIPS CPU emulator and a testbench that executed and tested 53 MIPS instructions

Face Detection with an FPGA (Year 1 End of year project)

Apr 2015 – May 2015

- Implemented real-time face detection on a video feed using Catapult-C and Quartus