

EDUCATION

Imperial College London

MEng Electronic and Information Engineering (EIE) – Graduated with Upper 2:1

July 2018, London, UK

Indian School Muscat

Class XII CBSE Board: 97% (3rd highest percentage in Gulf countries. Top 5% in CBSE).

May 2014, Muscat, Oman

- Passed IIT - JEE Mains.
 - SAT 2 – 2400/2400: Maths (800/800), Physics (800/800), Chemistry (800/800)
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Projects:

For more details on my projects, please see my [my Website](#).

Final Year Project: Drone State Estimation and Navigation using IP cameras

April-June, 2018

Successfully designed and implemented a cost-effective and complete system for real-time state estimation and navigation of a Parrot A.R. Drone using multiple (external) Internet Protocol (IP) cameras and LEDs in visible spectrum.

Arm Software Development Intern (6 month / Industrial placement)

April-Sept, 2017

Successfully assessed feasibility of using LLVM Compiler toolchain for compiling Arms Architecture Specification Language. Also worked on reducing build/run-time for Compiled Model of Arm v8A architecture. Extended a compiler optimization using global integer range analysis for changing datatypes of variables and functions.

C90 Compiler (in C++) to MIPS Assembly

November-December 2016

Built a C90 compiler through the various stages – Lexing, Parsing, Target Code Generation for the gnu-mips ISA. Involved making OOP classes for each construct in the C90 Grammar specification, then making an AST and producing MIPS Assembly code while traversing the AST.

Learning Outcome -

1. Gained a good understanding of C grammar.
 2. Gained a good understanding of MIPS ABI.
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Hobbies/Interests

- Chess tutoring: Tutor at Ladies Of Victories Primary School.
- Sports: Football, Chess, Table tennis, Badminton.
- Volunteering.

Olympiads/Awards

- Captain of Inter-school chess clusters – Winners (2012)
 - English Olympiad (2010) , Science Olympiad (2011) , Maths Olympiad (2011/2012)
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SKILLS & INTERESTS

- Fluent in English and Hindi. Basic knowledge of Spanish.
- Programming skills: C, C++, Java, Python, Verilog, Matlab.
- IT proficiency: Excel, MS Word, PowerPoint.