

## EDUCATION

### Indian School Muscat -

Muscat, Oman

Class XII – CBSE Board – 3<sup>rd</sup> highest percentage in Gulf countries. Top 5% in CBSE.

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

### Imperial College London -

London, UK

MEng Electronic and Information Engineering – First Class expected ( 2018 )

Electronics and Information Engineering (EIE)

- 1<sup>st</sup> Year – Secured 71% Overall
- 2<sup>nd</sup> Year – Secured 65% Overall
- 3<sup>rd</sup> Year – Secured 67% Overall

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## Projects

For more details on projects below please see my [Portfolio](#)

### 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.

### Risk Profiling Model ( Summer Internship )

July-Sept, 2016

Successfully built a Risk Profiling Model as a Web application. Built Front-End UI using Bootstrap, jQuery, Application layer using JavaEE components and Back-End using SQL Server.

### C90 Compiler ( in C++ ) to MIPS Assembly

January,2016

Built a C90 compiler through the various stages – Lexing, Parsing, Target CodeGeneration 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.

### MIPS Cpu Simulator and test bench in C++

October,2015

Built a MIPS CPU simulator and test bench as part of a coursework. Implemented 53 instructions of the MIPS 1 Instruction set. It helped me appreciate the importance of forming a test bench.

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## SKILLS & INTERESTS

- Programming skills: C++, Java, Python, Verilog, Matlab, Robotics
- IT proficiency: Excel, MS Word, PowerPoint.
- Highly motivated towards learning, good teamwork skills, good presentation skills.
- Fluent languages: Hindi, English.

## **Hobbies/Interests**

### **Volunteering**

Chess tutoring – Our Ladies Of Victories Primary School.  
Football, Chess, Table tennis, Swimming.

## **Olympiads/Awards**

Captain of Inter-school chess clusters – Winners (2012)

English Olympiad (2010), Science Olympiad (2011), Maths Olympiad (2011/2012)