

# Muhamad Gafar

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## EDUCATION

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- **Imperial College London** London, UK  
*Master of Science in Computing Science* Oct. 2017 – Sept. 2018
  - **Relevant Modules:** Machine Learning, Computer Networks and Distributed Systems, Program Design and Logic, Computer Systems, Databases, and Software Engineering
- **University of York** York, UK  
*Bachelor of Engineering in Electronic Engineering with Nanotechnology* Sept. 2014 – July 2017
  - **Classification:** First Class Honours (with Distinction)
  - **Awards:** Examiners Prize for Sustained Academic Excellence Throughout the Degree Programme
  - **Relevant Modules:** Digital Engineering, Design and Construction, and Project Management
- **Repton School Dubai** Dubai, UAE  
*IB Diploma:* Including HL Physics (6), HL Mathematics (5), HL Chemistry (5) Sept. 2012 – July 2014  
*OCR FSMQ:* Advanced Mathematics Grade A Sept. 2011 – July 2012  
*IGCSEs:* 7A\*, 3A, 1C - Including A\* in Mathematics and English Literature Sept. 2010 – July 2012

## RELEVANT PROJECTS

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- **Master's Thesis** London, UK  
*xDrone: Object Recognition and Domain Specific Language (DSL) Development* June 2018 – Sept. 2018
  - **About:** Developed a DSL with support for autonomous flights, face detection, and feature matching on a *Parrot AR Drone*. A web application was also developed with an embedded IDE so users can utilise the DSL.
  - **Key Learnings:** Became familiar with industry standards for software engineering, these include: continuous integration, user-centric development, build automation systems (Gradle), and version control systems (Git).
- **Digital Engineering Group Project** York, UK  
*Speed Reader* Nov. 2016 – Jan. 2017
  - **About:** Implemented a speed reader by using VHDL and structural design to program an FPGA. Also looked at the effects of instruction pipelining to make use of parallelism in hardware and increase the circuits throughput.
  - **Key Learnings:** Developed effective task delegation and communication skills when working with a partner.
- **Software Engineering Group Project** York, UK  
*Media Player and Server* Mar. 2016 – May 2016
  - **About:** Developed a streaming media player software, based on Java, using basic network communication for streaming using socket programming.
  - **Key Learnings:** Gained understanding of the Agile Manifesto proclamation. The work was split into sub-tasks which were divided between myself and a partner; at the end of each sprint the code was combined.

## POSITIONS OF RESPONSIBILITY

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- **Third Year BEng Course Representative** Sept. 2011 – July 2012
  - **About:** Engaged with the student body to raise any concerns or suggestions to the Electronics department. Attended Student Staff Liaison Committee meetings and Board of Studies meetings and present reasoned arguments for desired changes in the department.

## SKILLS

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- **Programming Languages:** C++, Java (including Xtend), Node.js, Prolog, VHDL, HTML, and CSS
- **Spoken Languages:** Fluent English and Portuguese, beginner French

## HOBBIES AND INTERESTS

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- **Football:** Represented Vanbrugh College while studying at the University of York and stood as captain for some games. Took part in the annual inter college cup, twice.
- **Duke of Edinburgh Gold Award:** Navigated and trekked a mountain, in Nepal. Was part of a charity team that worked on renovating a school at a local village.