

# GASIM AHMED

+44 (0) 7873 910049

gasim.gasim16@imperial.ac.uk  
www.linkedin.com/in/gasim-gasim  
www.github.com/gasim97  
www.gasim.info

## Education

**Imperial College London** – London, UK 2016-2020  
*MEng Electrical and Electronic Engineering with Management – Expected 1st*

- Designed and built a prototype of a planetary rover that can be remotely controlled from a handheld device, and relay real-time sensor data and ‘exorock’ detections to the user | *C++, Arduino, ESP8266*
- Devised an innovative solution to drastically cutdown emergency medical services response times irrespective of traffic- or infrastructural-conditions, and developed a prototype with a team of peers | *Python, TensorFlow, Raspberry Pi*
- 3rd year modules include High Level Programming, Machine Learning, Artificial Intelligence and Deep Learning | *F#, Python, Keras, Prolog*

**The British International School of Jeddah (BISJ)** – Jeddah, KSA 2003-2016

*International Baccalaureate (IB) Diploma*  
*International General Certificate of Secondary Education (IGCSE)*

- Designed and developed a user-friendly program that organizes sporting events for the Student Council Executive Team, which led to faster (3 days to 20 minutes) and error-free event planning | *Java*
- Balanced Student Council Executive Team Vice President duties with 4 demanding higher level IB subjects (Mathematics, Physics, Computer Science and Economics)

## Awards

1<sup>st</sup> Prize | 2018 Second Year Group Project – *Imperial College London* Jun 2018  
Outstanding International Student (OIS) Award – *The University of British Columbia (UBC)* Feb 2016  
International Baccalaureate (IB) Academic Scholarship (Awarded to 5 out of 67 students) – *BISJ* Oct 2014  
Top in Saudi Arabia for International Mathematics – *Cambridge International Examinations* Feb 2014

## Notable Programming Projects

**VisUAL 2** Feb-Mar 2019

- VisUAL 2 is an ARM A32 Assembly language teaching tool, editor and emulator designed to make learning ARM Assembly easier, which is largely written using functional programming
- Developed and integrated a new scope trace feature into the application to support easier learning
- The new feature monitors signals of interest during a program's runtime to display relevant information to the user as a digital or analogue trace, and makes use of runtime checkpoints for time-efficient re-simulations to support memory-efficiency and a smooth user interface | *F#, HTML, CSS, SVG*

**FLEET Vision and Control System** Mar 2018

- The FLEET project involved the design and development of a drone attachment delta robot that can autonomously provide first-aid treatment for gunshot wounds and save lives, through a system that guarantees emergency medical services response times of under 5 minutes
- Developed a wound detector and tracker using a CNN and blob detector, as well as a PID control system to enable the delta robot's vision and movement in a group of 3 | *Python, TensorFlow, Raspberry Pi*

## Experience

**Imperial College London** – London, UK Aug-Sep 2018  
*Undergraduate Researcher, Intelligent Digital Systems Lab (iDSL)*

- Investigated the effects of quantization on the correlation of top results in CNNs
- Developed a framework for and automated the correlation of top results investigation in Python
- Used the TensorFlow Hub API to collect data on 32 published modules for analysis
- Built a results database in SQL, and functionality to export results to CSV files for easy data sharing

**McKinsey & Company** – London, UK Apr 2018

*Discover Digital Programme*  
*Technology Spring Intern*  

- Reviewed and redesigned a substandard mobile app-based customer registration process, reducing the process from over 30 screens to 6, and cutting the registration time from over an hour to 3 minutes
- Expanded my problem solving and design thinking knowledge through professional skills sessions

**Morgan Stanley** – London, UK Apr 2018

*Technology Spring Intern*  

- In a group of 4, developed a plan of action for a directed share program, which involved contacting 600,000 people through various means to disseminate a prospectus and confirming orders in 31 days
- Developed my problem solving and logical thinking, pen and paper programming, as well as presentation and networking skills through professional skills sessions

**Grundstein Global** – London, UK Jan 2018 –

*Co-Founder*  

- Designed and developed the structure and activities of a community and personal network for ambitious and talented individuals from a diverse range of professional and social backgrounds
- Managing the development of the community's website and web-based platform
- Developed the community's recruitment strategy and leading the recruitment team, which has recruited 18 qualified members as of yet

## Languages

English	First/Native Language
Arabic	First/Native Language

## Programming Languages

Java	SQL
C++	HTML
Python	CSS
F#	ARM A32 Assembly

## Hardware Experience

FPGA	Arduino
Raspberry Pi	ESP8266

## Recent Hackathons

Algothon 2018 at BlackRock Nov 2018  
Developed an R-CNN to forecast stock prices | *Python, TensorFlow*

IOHack 2018 Jan 2018  
Designed a social media website for entrepreneurs to meet and safely share ideas and feedback, and built the front-end | *HTML, CSS, JavaScript*

## Organizations

The Institution of Engineering and Technology Nov 2016 –  
Student Member

Institute of Electrical and Electronic Engineers Jul 2016 –  
Student Member

## Volunteering

Therapeutic Horse Riding Aid 2015  

- Volunteered for Open Skies, a scheme that provides therapeutic horse riding for physically disabled children in Jeddah, Saudi Arabia
- Awarded best volunteer out of 36

Event Manager 2011 - 2012  

- Independently organized an annual charity soccer event for 200 participants in Sep 2011 and 2012
- Negotiated sponsorships for the events from companies including Pepsi Co., UPS and Sports Look
- Raised the awareness of peace in my local community and over \$10,000 for the Peace One Day organization

## Activities and Interests

Imperial College Electrical Engineering Society  
Imperial College Association Football Club  
Imperial College Model United Nations Society  
Imperial Entrepreneurs  
Guitar