# Fawaz Shah

Room 40G03, Wilson House, Sussex Gardens, W2 1UF

### **Education**

### Imperial College London

BEng. Mathematics and Computer Science (Joint Honours)

2017-2020

Current modules of interest: Java, Logic, Graphs and Algorithms, Applied Methods and Linear Algebra

St. Olave's Grammar School

O GCSEs and A Levels 2010–2017

A Levels: 4 A\*s (Maths, Further Maths, Chemistry, Physics) & 1 A (EPQ)

AS Levels: 1 A (Computing) GCSEs: 10 A\*s & 2 As

### **Technical and Personal Skills**

- o Written Python code for maths-intensive personal projects, such as matrix inversion and manipulation of coprime theory and the Mandelbrot set
- o Implemented Haskell in scenarios such as writing a mail-merge program, generating fractals using Lindenmayer systems and creating a symbolic calculus interpreter
- o Implemented Java in situations such as solving the shortest path problem, scheduling timetables and basic critical path analysis
- o Written a countdown web app in HTML5, using CSS3 for styling and JavaScript for logic-handling
- o Hosted and managed a public web server on a Raspberry Pi, using knowledge of Bash and Linux
- o Familiar with git and programming on Unix systems

## Positions of Responsibility

### o Imperial College JMC Year 1 Academic Representative

Sep. 2017 - Jul. 2018

Current duties include:

- Collecting feedback from other first year JMC students and passing it on to the coordinators of the degree
- Reporting any academic issues to relevant lecturers or administrative staff
- Working with senior members of staff and other representatives to solve problems faced by JMC students

### o President of St. Olave's Computer Science Society

Jan. 2016 - Dec. 2016

- Scheduled regular meetings throughout the year, presented talks on significant topics such as quantum computing and artificial intelligence, and encouraged younger students to give presentations themselves
- Expanded the size of the society, by opening it up to all years instead of just 6th form and promoting it heavily
- Organized a presentation given by a senior developer at Oracle, achieving record turnout to the Society
- Helped organize the St. Olave's Programming Competition, a 1-term-long coding competition for younger students

#### o St. Olave's Computing Prefect

Sep. 2016 - Feb. 2017

- Mentored a GCSE Computing student, checking up regularly and ensuring he was coping well with the curriculum
- Arranged St. Olave's Raspberry Pi club, helping younger years to learn Bash and Python

### **Notable Achievements**

o Published a dissertation on "The socioeconomic effects of artificial intelligence in the future" in the St. Olave's Academic Journal