

## Juvraj Singh Sawhney

147 Long Lane, Hillingdon, Uxbridge, Middlesex, UB10 9JN

Email: [juvraj@gmail.com](mailto:juvraj@gmail.com)

Mob: +447887887007

### Education and qualifications

#### Trinity College, University of Cambridge

2018 - 2022

MEng. Engineering

- The first 2 years of the course include Mechanics, Structures, Materials, Thermofluid Mechanics, Electrical Engineering, Information Engineering, Mathematics and Business
- Our Coursework involves Python programming (including Git for version control), Structural Design Project, Hand drawing skills, CAD (Solidworks), Laboratory experiments and reports, Lego Mindstorms Project, Integrated Electrical Project, Integrated Design Project and Mars Lander
- Completed Advanced Plus Spanish in first year

3<sup>rd</sup> Year Courses (specialism in Information Engineering):

Marketing	Statistical Signal Processing	Introduction to Neuroscience
Modelling Risk	Data Transmission	Mathematical Methods
Semiconductor Engineering	Information Theory and Coding	
Signals and Systems	Inference	

#### Haberdashers' Aske's Boys' School, Elstree

2011 - 2018

A-Levels: Mathematics (A\*); Further Maths (A\*); Physics (A\*); Spanish (A)  
- 600/600 UMS in Maths and 591/600 UMS in Further Maths (Highest in my year)

GCSEs: 9 A\*s and 2 As

### Experience

#### Cambridge University Sikh Society

*President*

*March 2020 - Present*

My first term as President was very different to what I expected since university was being conducted online. We started running events, both religious and social, virtually, and used this opportunity to increase our online presence by revamping the Instagram account and creating a Society Twitter account and website. During the Summer, we organised an Access Conference to take place virtually in November joint with Oxford University Sikh Society. This required me to delegate tasks effectively, make sure everyone involved in planning stuck to their deadlines, and organise meetings when necessary to resolve any urgent issues and to keep everyone updated with progress.

*Events Officer*

*March 2019 – February 2020*

My role for the year required me to organise a range of events to make sure the Society is active and that everyone feels welcome and involved. I took the lead role in organising a big academic conference in November with guest speakers. This required me to develop strong organisational and time-management skills since it required a lot of forward planning, in addition to effective publicising for a good turnout. Organising the event also involved a lot of communication since I needed to interact with speakers and sponsors, as well as with other members of the committee to plan and publicise it, including managing a budget. When running our Music and Art Conference in February, I was able to build and improve on these skills and learn from my mistakes. In addition to running events, I also helped gain sponsorships for the Society, and I arranged personalised hoodies for our members. This further boosted my ability with handling a budget as well as my communication.

## **Trinity College Engineering Society**

### **Webmaster**

*April 2019 – May 2020*

My responsibilities for the year were to look after the TCES website, which taught me the basics of Web Design. I also organised stash for the society, which required managing a budget, communicating with the production company, and collecting orders and receiving payments within a timeframe.

## **Smallpeice Trust Computing and Microelectronics course**

*August 2017*

### **University of Southampton**

I worked in a team to design and build an autonomous robot over the course of a week. We programmed it in Python for it to compete against other teams.

## **Debate Chamber Maths Summer School**

*July 2017*

During this one-week summer school, we learnt topics outside of the school syllabus and about the applications of maths and why it is essential for engineering and computer science.

## **Sustainable Power Engineering Headstart course**

*July 2017*

### **Lancaster University**

We applied our AS knowledge to build a miniature wind-turbine in a team using Solidworks. We then presented our design to the other teams at the end of the week.

## **Microchip Programming with Electronics**

*December 2016 – January 2017*

I participated in this 7-week course through my school's enrichment scheme, where I programmed a small robot car in C on a PIC microprocessor.

## **Other skills and achievements**

---

September 2020	Completed Harvard's 'CS50's Introduction to Computer Science Course' on edX
March 2019	SoloLearn Certificate – C++ Tutorial Course
March 2018	UK Linguistics Olympiad – Bronze Award
November 2017	Duke of Edinburgh - Gold Award
March 2017	British Physics Olympiad AS Challenge – Silver Award

## **Activities and interests**

---

- I have been receiving tennis coaching since I was 10 and now play college-level tennis
- I have been playing hockey since Year 7, played for my school's 2<sup>nd</sup> XI and now play for Trinity
- I am a member of the University Bhangra Society, where we practice regularly and have performed at Hindu Society's Mastana Event
- I participate in the Hemkunt Speech Competition (where we research a specified topic, prepare a speech, and present it to an audience and judges) every year, and reached the international round in 2012 and 2018
- I love travelling and learning about different cultures, having visited Spain, Portugal, Italy, India, Hong Kong and Macau all in recent years

## **Referee**

---

Dr Stuart Haigh  
Director of Studies  
Department of Engineering  
University of Cambridge  
[skh20@cam.ac.uk](mailto:skh20@cam.ac.uk)

Mr Amlot  
Head of Sixth Form  
Haberdashers' Aske's Boys' School  
Butterfly Lane, Elstree, Herts, WD6 3AF  
[amlot\\_r@habsboys.org.uk](mailto:amlot_r@habsboys.org.uk)