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# Neelu Saraswatibhatla

2nd year Computer Science student at the University of Cambridge

neelu@sbneelu.com | sbneelu.com | github.com/sbneelu

## LANGUAGES AND FRAMEWORKS

Python - 5 years

JavaScript - 5 years

PHP - 5 years

SQL - 4 years

Java - 2 years

OCaml - 1 year

Bootstrap - 3 years

Flask - 2 years

Node.js - 1 year

Angular - 1 year

MongoDB - 1 year

## EDUCATION

### King's College, University of Cambridge

OCTOBER 2020 - PRESENT

In Year 2 of a BA (Hons) Computer Science degree

Year 1 Result: Class II, Division I (Upper Second Class)

### James Gillespie's High School, Edinburgh

AUGUST 2015 - JUNE 2020

**Advanced Highers:** Maths (A1), Physics (A1), Mechanics (A1), Statistics (A1)

**Highers:** Maths (A1), Physics (A1), Chemistry (A1), Biology (A1), French (A1)

**National 5s:** Maths (A1), Physics (A1), Biology (A1), French (A1), Psychology (A1), History (A1), Chemistry (A2), English (A2)

## PROGRAMMING EXPERIENCE

### CAUSE.cx - Senior Developer

DECEMBER 2020 - PRESENT

- Developing a social media app made for activists with a team of 5 other students, collaborating using Git.
- Developing as a progressive web app using a MEAN stack and deploying with Heroku.

### Cirrus Logic, Edinburgh - Work Experience

JULY 2019

- Controlled registers of Cirrus Logic's Lochnagar 2 board and routed sound through specific channels using low-level code, and built a UI for this using C#.

## PROGRAMMING PROJECTS

### Dijkstroute

FEBRUARY 2021

- Created a script that uses Dijkstra's algorithm to find a route from the start to the end point of an ASCII maze if one exists, and the shortest such route if multiple exist.

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## Image compression using k-means clustering

NOVEMBER 2019

- Implemented the k-means clustering algorithm to compress an image by recolouring using a certain small number of colours.

## JGHS DofE

OCTOBER 2019 - APRIL 2020

- Developed a website for the Duke of Edinburgh award department at school to easily get information, announcements, and resources to students.
- First created in PHP, and then rewritten with Flask.

## Computer Science Summer School Team Project, University of Sheffield

JULY 2019

- Won second prize for a web app called MyRanker to rank universities based on users' individual preferences developed in Java and Python with a team of students, collaborating using Git.

## AHmaths.com

FEBRUARY 2019 - APRIL 2020

- Developed a revision website for Scottish Advanced Higher maths which is used by thousands of students every year.
- Wrote the first version in PHP, and then an improved version with Flask.

## OTHER EXPERIENCE

### UniAdmissions - Tutor

AUGUST 2021 - PRESENT

- Tutoring students applying to study Computer Science at universities including Cambridge

### CamSCOT - Volunteer Tutor

JULY 2021 - PRESENT

- Tutoring Scottish students applying to study Computer Science and related courses at Cambridge

### First Class Learning - Maths/English Tutor

FEBRUARY 2019 - FEBRUARY 2020

- Tutored students aged 5 - 16 in Maths and English.

### Maths Tutoring

OCTOBER 2018 - FEBRUARY 2020

- Ran a maths homework help club at my high school.

### British Heart Foundation - Cashier

MARCH 2018 - DECEMBER 2019

- Volunteered at a British Heart Foundation charity shop as a cashier.

## AWARDS

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- Was invited to a **CyberStart Elite** event in London in 2019 as one of the top 500 performers in the country in CyberStart, a cybersecurity and programming challenge run by Cyber Discovery and the UK government.
  - Achieved Silver and Gold awards in **Scottish Maths Challenge** in 2018, 2019 and 2020.
  - Achieved gold awards in **UKMT Intermediate and Senior Individual Maths Challenges** in 2017, 2018, and 2019, progressing to **British Maths Olympiad** in 2019 and to **Intermediate/Senior Kangaroo** in 2017 and 2018, achieving Merits both years.
  - Came 1st place as a team in the **Scottish Enterprising Maths Team Challenge** in Edinburgh in 2017, and progressed to Nationals, achieving 3rd place.
  - Completed the **Duke of Edinburgh's Award** at Bronze and Silver levels, with Gold currently in progress.