# SOPHIE THOMPSON

► +44 7984 391935 Sophiet1400@gmail.com Github.com/sophiethompson1 sophiethompson.uk in linkedin.com/in/sophiet1

### **EDUCATION**

2018 - 2022 | Imperial College London

MEng Computing

- Year 2: First-class honours with 84% in lab projects and 82% in Software Engineering Design
- Year 1: Upper Second class honours with 88% in Mathematical Methods

2011 - 2018 | Westcliff High School for Girls

Sixth Form, and Secondary School

• A Level: A\*A\*A\* in Maths, Further Maths, Chemistry, and Physics

#### WORK EXPERIENCE

2020 | American Express

Software Engineer Summer Intern

In a team of 7 we worked on a microservice in MARS (Modern Accounts Receivable Service), done in **Java** using **Spring**. The microservice was testing using **Chaos Engineering**, we killed pods and tested that the services continued to work as usual. During my time at AmEx we completed 2 sprints, for a sprint I acted as Product Owner within our team. Being Product Owner meant taking on a leader role and monitoring the team's progress and effectiveness. Throughout my sprint as Product Owner I demoed and presented our product to large groups of people.

# PROJECTS

2020 Unicompare Python

In a group of 4 we developed a webapp for prospective university students to compare universities in both social and academic aspects. The webapp was mainly **Python** using **Django** and some **HTML**, **CSS** and **Javascript**. In the webapp the user gets directed to a quiz that asks what is important to them. Universities are then ranked based off of this information, the user is given a shortlist of 5. The webapp was developed through numerous design iterations with multiple stakeholders. In this project we used **Postgresql** for the database and **Heroku** for deploying

2020 Optimising Compiler

Java, ARM

A compiler for the simplified language WACC. This compiler was written in Java and is capable of translating WACC into ARM assembly code that can then run, giving the desired output of the program. We expanded the basic compiler to include overloading variables and functions (based on parameters and/or return types). Optimisations include constant evaluation and control flow.

2019 | Pintos

During this project we built on **legacy code** to build an OS that implements a scheduler, system calls and virtual memory.

2019 | Terminal Squares

 $_{
m Java}$ 

Squares is a game that you get points by making squares. I made the game with gameplay options and an option of 2 human players or playing against an AI I designed

2019 | ARM Project

C, ARM

writing an assembler and dissassembler in C, writing some assembly code that was then run on our disassembler. Followed by an extension using a Raspberry Pi to make a binary numbers game

## SKILLS & INTERESTS

Programming

Comfortable with Python, C and Java. Also have various amounts of experience in Haskell and C#. Comfortable with tools such as version control and CI/CD also with markup language LaTeX.

Web Based

Comfortable with HTML, CSS and some experience in Javascript

Ten-Pin Bowling Have competed internationally both independently and as part of Team England. In 2018 became double European Champion collecting 2 golds and a silver in the European Youth Championships in Denmark. During my time bowling have acted as team captain in multiple teams.