Address 37 Twyford House, London,

N5 1EJ

Email <u>hirst.jj@googlemail.com</u>

Phone 07504 456577

James Hirst

Qualifications:

- MMath, Mathematics Master's Degree, University of Cambridge, Jesus College (2021-22)

Pass with Distinction (79%)

 Modules: General Relativity, Black Holes, Quantum Field Theory, Cosmology, String Theory and The Standard Model

BA, Mathematics Degree, University of Cambridge, Jesus College (2018-2021)

o 1st Class in third year (position: 14/222, percentage: 86%)

Jesus College Mathematics Award in second year (2019-20) as top performer

o 1st Class in first year (position: 61/232, percentage: 72%)

A-Level: 5x A*- Maths, Further Maths, Additional Further Maths, Physics, Chemistry

AS- Level: 1x A- Economics

IGCSE/ GCSE: 14x A*'s and an A

Employment and Experience:

• Software Engineer, Microsoft (Sep 2022-Present)

- Working on Azure to deploy a voicemail solution for a large telco. Using Kubernetes infrastructure for maintenance and debugging, writing Python automation scripts to manage and fix CVEs, and working with Rust to improve the solution functionality.
- Worked with Java and JavaScript to maintain a workplace messaging app sold to small businesses that integrates with users mobile numbers.
- Built a personal website using React https://www.jamesjhirst.com/.
- Software Engineer at Microsoft, 8-week virtual internship (2021) writing Python scripts to improve the automation of VM deployment and management for products in the telecoms sector.
- Led a team to win BL4S (2016), an international competition held by CERN. Our winning
 proposal was an experiment to investigate Einstein's Special Theory of Relativity. Subsequently
 completed data collection using a particle accelerator at CERN and published a scientific paper
 in IOP Journal and on the CERN website.
- Worked on a machine Learning Ecology project (2022) using Detectron2 to predict the location
 of tree crowns to improve estimates of carbon store in forests and other locations. Resulted in a
 scientific paper published in a variety of journals.
- Restaurant manager with Hotelplan (2017-18) during a winter season, managing 20 staff of varying ages. Achieved 'Mountain Spirit Award' out of 500 employees for performance.
- Private tutoring for Maths as well as Explore Learning Colchester Tutor (2017).

Volunteer Work:

- 1. Shark Trust- machine learning and data management for an outreach project.
- 2. Kids Inspire- raising awareness for mental instabilities and disabilities in children.
- 3. Chelmsford Boys Club- painting and renovating youth rooms.
- 4. Youth Enquiry Centre Colchester- gardening and maintenance of the centre.

Personal Qualifications: