OLIVER SINGH

Personal Information

Date of Birth: 25th March 1995

EMAIL: oliver.s.singh@gmail.com

PHONE: +447443656430

Experience

May. 2022 to

Evariste Technologies

Present

Quantitative Analyst

Evariste is a small drug discovery company which uses simulation, modelling, and machine learning to search virtual libraries of billions of drug-like molecules for candidate molecules for drug development. My roles include working as a developer (using Python) and data scientist to develop and implement models, and also involve some data engineering to deploy these models.

Jan. 2021 to Mar. 2021

Max-Planck-Institut für Mathematik

Visiting Researcher

Visiting the mathematics research institute in Bonn, Germany, to carry out collaborative research in low-dimensional topology.

Jun. 2020 to Dec. 2020

Cabinet Office - COBR, COVID-19 Taskforce

Grade 7 - Senior Analyst, Data Scientist

Surge hire during the COVID-19 crisis. Initially working for CCS and COBR, I directly contributed to briefings for the prime minister, ministers, and senior officials on the status of the pandemic. From August I worked within the Covid-19 taskforce, and worked on and managed data science projects (primarily written in Python). Throughout, I helped to run an intra-government COVID-19 dashboard, and designed and wrote a Python package used by analysts for the day to day running of the dashboard.

Papers

Nov. 2021 | Pseudo-isotopies and diffeomorphisms of 4-manifolds, Preprint, arXiv:2111.15658.

MAY 2019 | Distances Between Surfaces in 4-Manifolds, Journal of Topology, 13. 1034-1057.

Education

Oct. 2017 to | University of Durham

Jun. 2022 | PhD in Mathematics

Research in Low dimensional topology, under the supervision of Dr. Andrew Lobb and Dr. Mark Powell. Funded by an EPSRC grant.

Oct. 2013 to | University of Cambridge, Mathematical Tripos

Jun. 2017 BA with MMath, First Class + Distinction

Distinction in part III and first class in part II.

SEPT. 2011 to | St. Aidan's & St. John Fisher Associated Sixth Form

Jul. 2013 A-Levels in Mathematics A*, Further Mathematics A* and Physics A*. AS-Level Chemistry,

A.

STEP: Paper I S, Paper II S, Paper III 1.

Academic Talks

I have given talks on my research in person at the University of Geneva, the University of Sydney, the University of Cambridge, Durham University, and the Max Plank Institute for Mathematics. I have also given virtual talks for a number of geometry and topology seminars.

Skills

Experienced programming in Python and using data science tools in a collaborative setting using Gitflow. Experienced working with Linux; part of my current role is system administration of the company's Linux server. Some experience with AWS cloud computing services.