Oliver Soeser

Experience

Teaching Support Provider

September 2024 - Current

School of Informatics, The University of Edinburgh

I am part of the course teams for the Introduction to Computation and Object Oriented Programming courses at Edinburgh University. I have listed some of my responsibilities for each course below.

Introduction to Computation (Tutor and Marker):

- Run tutorials teaching functional programming in Haskell and computational logic, such as finite state
 machines and the sequent calculus.
- Mark and give feedback on students' coursework, guiding progress in their studies.
- Support students with queries about course content, both in tutorials and the course's online forum.

Object Oriented Programming (Tutor, Demonstrator, and Marker):

- Run lab sessions for students to develop their Java programming skills.
- Support students with questions regarding the course content and coursework.
- Offer guidance for students struggling with the course.

Education

The University of Edinburgh

September 2023 - Current

Computer Science and Mathematics (BSc Hons)

I am a dedicated student with consistently outstanding academic performance (see second page). I also engage with the university community in a number of ways:

- Active in TypeSig, the type theory special interest group, with an interest in the formalisation of the foundations of theoretical computer science.
- Working on computer-verifiable proofs of undergraduate mathematical theorems in the Lean interactive theorem prover.
- o Class representative on the Staff-Student Liaison Committee.

Brockenhurst College

January 2022 - June 2023

A Levels

Mathematics (A^*) , Computer Science (A^*) , and Politics (A^*) .

Projects

Data Visualisation Engine

A data visualisation tool written in pure TypeScript creating intelligent layouts for network graphs, using a physics-based drawing algorithm. The demo uses Edinburgh University course data processed using Python.

Euclid Animated GitHub Repository

A custom Python package extending the Manim animation library to create illustrations explaining and demonstrating postulates from Euclid's Elements, based on Oliver Byrne's colourful edition.

Skills

Languages: English (C2), German (native)

Technologies: Python, C, C++, Java, Haskell, Lean 4, JavaScript, TypeScript

Volunteering

Counting Agent 4 - 5 July 2024

Appointed counting agent at the City of Edinburgh's 2024 UK General Election count.

Appendix A: Academic Record

Course	Mark	Grade
Probability	95	A
Facets of Mathematics	84	A
Several Variable Calculus and Differential Equations	79	A
Calculus and its Applications	88	A
Proofs and Problem Solving	85	A
Object Oriented Programming	94	A
Philosophy of Science	67	В
Introduction to Linear Algebra	97	A
Introduction to Computation	100	A

I am currently taking $Introduction\ to\ Algorithms\ and\ Data\ Structures,\ Foundations\ of\ Data\ Science,\ Computing\ and\ Numerics,\ Statistics,\ and\ Fundamentals\ of\ Pure\ Mathematics.$