# Yuhao Han (Harry)

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I am a final year undergraduate student at the University of Edinburgh studying pure mathematics. I am intrigued by the mathematical world, especially by geometry and algebra.

These subjects I believe will have imminent connections to the real world and will solve difficult problems that are otherwise unsolvale. To discover these connection requires ingenuities more than mathematics. With such aspiring hopes, I am preparing myself for the furture enterprise by studying CS, chemistry, physics, and founding Yetin LTD.

## Education

**University of Edinburgh**, MMath (Hons) Mathematics. Graduating in Jun 2026.                                    Sept 2021 – Now

- Expected Grade: First-Class Honours
- Modules taken: Algebra, Analysis, Differential Equation, Topology, Geometry, Lie Group, and Statistics

## Experience

**Yetin Ltd**, cofounder                                    Dec 2023 – Now

- Yetin is a private limited company registered in Scotland, founded by me and another classmate.
- Yetin Guide for Coding is a tutorial for people trying to learn coding by themselves. This book, emphasising on Linux and foundations of CS, adoptes an idiosyncratic approach and is prereleased on book.yetin.net.

**Research Dolphin Interconnect PCIe NTB**                                    Oct 2023 – Feb 2024

- I was part of the research group of Dr. Antonio Barbalace in the school of informatics at the University of Edinburgh.
- My work includes benchmarking virtual cachable memory provided by Dolphin NTB and developing drivers and softwares to increase its efficacy. All works were within Linux kernel.
- Part of the larger research project on Computer Express Link.

**Summer Research on Algebraic Geometry**, Scottish Summer Research Scheme                                    May 2024 – Aug 2024

- Study a specific type of affine hypertoric variety and develop an algorithm to count its $F_q$-count polynomials, which is compared with the h-polynomial of the complex associated with the corresponding hyperplane arrangement
- The theoretical algebraic problem was broken down to an equivalent combinatoric problem of counting points of intersections of simple hyperplane arrangements in $F_q^n$, $q$ is prime.
- Supervised by Dr. Sukjoo Lee in the University of Edinburgh.

## Bursary

Professor Sheridan's Simons Investigator Award, 2000£                                    Jun 2024

## Projects

**Lox Rust**                                    Aug 2024

- Fully functional interpreter from scratch in 5000 lines of Rust. It implements a mock language, lox.

**A formatter**                                    July 2023

A x86-64 assembly formatter in C.

## Programming Technologies

Linux • C • Rust • C++ • Bash • Fortran • LaTeX • Git • Vim • Typescript • React • Nextjs • Java OpenGL • Lua • Julia • Python • x86-64 assembly • MATLAB • Unity • AWS

## Languages

**Chinese**, Native • **English**, TOEFL 115/120 • **Latin**, Fluent to Read • **Italian**, B1 • **Russian**, Basic