# **Benjamin Cummings**

UK, London | +44 7982 430869 | benjamin.cummings23@imperial.ac.uk | https://www.linkedin.com/in/ben-cummings/

Penultimate-year Mathematics and Computer Science student with strong enthusiasm for software development and team collaboration. Skilled in problem-solving with a focus on efficiency and innovation.

## Relevant Experience

## Google | Software Engineer Intern

06/2025 - 09/2025

- Engineered a multi-platform compiler for WearOS declarative watch faces in Kotlin, enhancing the efficiency of watch face validation in the Google Play Store and Samsung Watch Face Studio.
- Presented in sprint reviews to senior developers and company executives.

## Inrupt inc. | Software Engineer Intern

09/2022 - 05/2023

- Developed and maintained the first Solid Java SDK APIs for interacting with Solid Containers.
- Designed an HTTP header parsing framework using ANTLR grammar for the Solid Client Libraries.
- Created a full-stack demo app with Spring-Boot to demonstrate the SDK and the power of Linked Data.

## Education

## Imperial College London | BEng Mathematics and Computer Science

09/2023 - 06/2026

- First-Class Honours (predicted) 1:1 in first and second year.
- Awarded the C Group Project Prize, Third Place for the Amadeus Prize ('Designing for Real People').
- Awarded 'Ash' Scholarship, part-time student at The Royal College of Music.
- Elected Treasurer for the Symphony Orchestra.

## Balerno Community High School

08/2016 - 06/2022

- A\*A\*A\*A\* in SQA Advanced Higher Exams and Seven A\* grades for SQA Higher Exams with highest mark in Computer Science, Music and English.
- Awarded School Dux Award (Valedictorian). TMUA: 7.0, STEP 2, and STEP 3 qualifications.

## Relevant Projects

#### Shop Sherpa | TypeScript, React, Next.js:

https://www.shopsherpa.co.uk/search

• Led development of a mobile web app guiding UK immigrants through grocery shopping. Uses barcode scanning to show real-time data on price, nutrition, sustainability, and brand reputation; includes a real-time community page and personalized product recommendations.

#### WACC Compiler | Scala:

https://github.com/BnjmnCummings/wacc

• Designed and implemented an end-to-end compiler for WACC, a simple teaching language. Used parser combinators to build a typed AST and generate optimized, memory-safe x86 assembly.

#### PintOS Operating System | C:

 $\underline{https://github.com/BnjmnCummings/pintos}$ 

• Implemented key operating system features including thread scheduling, synchronization, system call handling, and resource management, enabling safe and efficient execution of user programs in a low-level virtual OS.

#### Chess Game with AI Opponent | Java, Swing:

https://github.com/BnjmnCummings/chess

• Designed an interactive chess game with a customizable Swing GUI, game-saving functionality (MariaDB) and a Minimax-powered AI opponent.

#### Skills & Interests

#### Computer Programming:

- Proficient in Java, Kotlin, C, Haskell TypeScript and Scala. Experienced full-Stack web developer and Android developer.
- Strongly interested in low-level computing, compiler design and back-end development.

#### Music

- Freelance professional cellist. Achieved 98% in ABRSM Diploma.
- Part-time student at the Royal College of Music
- Appointed Principal Cellist of the National Youth Orchestra of Scotland. Selected for the National Youth Orchestra of Great Britain. Featured on BBC Radio Scotland, BBC One and in the BBC Proms.