HARINI SRITHARAR

Portfolio GitHub <u>Email</u> <u>LinkedIn</u>

About Me Enthusiastic third year student seeking a 6-month industrial placement in software development. Passionate to advance my programming skills, gain experience and create efficient solutions to real world problems.

Education Imperial College London

MEng Computing (Management and Finance)

Oct 2022 - June 2026

Predicted: 1st Class Honours

Demonstrated excellent time management skills to meet demanding coursework deadlines. Gained proficiency in Haskell, Kotlin, Java, C and Scala via a combination of weekly projects, exams and collaborative team projects.

Projects Designing for Real People : StudyPal (Kotlin)

May 2024 - June 2024

Developed an Android application as part of a university group project that students can use to curate a personalized revision timetable, adapting to changing commitments.

Features include auto-scheduling, progress tracking, dynamic rescheduling + gamification to maintain engagement.

WACC Compiler (Scala)

Jan 2024 – Mar 2024

Constructed a full compiler for a basic language called WACC. We implemented language extensions such as C-style macros and multiple file imports using Scala; as well as garbage collection and managed heap using C.

ICHack24 (React, CSS) Feb 2024

Developed a front end, as part of a hackathon project, for a teaching methodology that allows hardware and software to be combined to enhance the ways that young children can learn.

- Used React to create an interactive platform for teachers to submit and navigate through lessons
- Used REST API to dynamically fetch information used on the front end from the backend

Pintos Operating System Imperial College Edition (C)

Oct 2023 - Dec 2023

OS written in C for the 80x86 architecture, features we added were:

- Implemented thread scheduling, priority donation and a MLFQ to reduce the average response time for jobs.
- Added support for user programs by allowing ELF binaries and system calls to be processed.
- Implemented support for virtual memory, utilizing paging, swapping, memory mapping & dynamic stack growth.
- Identified and prevented deadlocks when implementing concurrency

Portfolio Website (React, HTML, CSS)

Aug 2023 - Present

Designed and developed an interactive website serving as a dynamic portfolio

June 2023

- Designed the UI for a program written in C providing a complete visualisation of any provided audio file.
- Utilized the GTK library to craft and deploy custom front end widgets, which dynamically adapt to real-time backend data inputs.

Revision Quiz App (Dart)

Sep 2021- May 2022

- Independently designed and programmed a quiz app, addressing scarcity of interactive resources for students
- Self-acquired proficiency in the Dart programming language and employed the Flutter framework to create an app with an engaging user interface.
- Utilized Firebase Cloud Firestore for seamless user authentication and efficient storage of user and quiz data.

Extracurricular DoCSoc Lead Front-End Developer July 2024 – Present Developing both internal tooling and participant-side websites using Nuxt.js, for ICHack25: Europe's biggest student run hackathon.

Baking Society Editor

Oct 2023 - June 2024

Created + maintained a communal recipe blog using React and Firebase to share baking recipes amongst members of the society.

Computer Science Tutor

Oct 2022 – Present

Organise and plan 1-1 sessions with GCSE and A Level students to offer support in consolidating subject content and refining exam technique.

Skills

- Dart + Flutter Framework
- JavaScript + React
- Vue and Nuxt.js
- Python
- Java
- Software and App Development
- Web Development
- Leadership
- Communication
- **Technical Writing**
- Time Management