

Vishaan Khanna

✉ vishaankhanna29@gmail.com in vishaan khanna

I am a master's student in Computer Science at the University of St Andrews. I am passionate about using technology to solve challenging problems. I have a strong technical background combined with solid soft skills developed through industry placements. I love collaborating to produce solutions and have experience planning and taking ownership of projects in industry.

Skills

Programming Languages: 4 years of Java and python, 3 of TypeScript Node.js, React, experience with Rust, Terraform, C and SQL. Comfortable working in Linux and using GIT

Technologies: Database design, Distributed systems and consensus algorithms including RAFT and Paxos. Deep understanding of internet technologies and protocols including TCP. Designing and implementing REST APIs. Certified AWS Cloud Practitioner. Have built multiple full stack containerized applications using Docker. Comfortable with data structures and asynchronous programming. Operating Systems concepts.

Skills: Fluent in Hindi (spoken only), Experience working in agile teams and have presented to both technical and non-technical audiences of up to 500 people. Requirements engineering and project planning.

University - St Andrews

MSCI in Computer Science

Graduation June 2025

At university I have worked on a variety of projects in a range of languages, working independently and in groups on both high and low level projects.

- Year long group project to build a networked multiplayer game with custom authentication between websites
- Scheduler and memory paging in C
- Designed and implemented a connection oriented transport protocol over UDP in C
- Distributed file sharing protocol over IPV6 multicast in Java
- Wrote the logic for the different types of Peer in Paxos
- Dungeon Crawler game with AI based on state machines and procedural level generation in Java

For my dissertation I am building a document management application utilizing blockchain to provide a distributed consensus layer using Hyperledger Fabric. I proposed the project and built it using a containerized approach with a custom API, and JSON based data standard for the system.

Experience

Individual Software Engineering Project - Microsoft

Summer 2024

- Worked as a full stack developer on an independent project which modernized the maintenance and distribution process of a tool upon which a major deliverable depends. I designed the database, REST APIs, built a script to generate an excel workbook dynamically from the database and built a front-end.
- Planned the project, made key decisions regarding features. The tool was deployed within Microsoft
- Collaborated with stakeholders across the organization to establish requirements. Pitched my solution to skeptical team members and won them over to my solution
- Proactively organized and held regular meetings with stakeholders to collect feedback. Adapted the project accordingly, quickly iterating while plugging gaps in my knowledge by working with subject matter experts like UX designers
- Wrote technical and user documentation to enable others to take over the project and assist users

Software Engineer Intern - Gemba Advantage

Summer 2023

- Worked in an agile team to build a website with a serverless backend using AWS Lambdas. Designed the REST API. Held daily stand-ups with an agile coach

- Participated in workshops on UX, terraform and product management
- Built a CLI tool in Rust which was delivered ahead of schedule after just a few weeks using the language.

Tutor - MyTutor

September 2020 - Now

- Worked as a tutor for 4 years independently finding clients, negotiating rates and organising sessions
- It has developed my ability to explain concepts and relate to people, making me a more effective communicator, retained clients for multiple years

Intern - Cyberfirst Academy

Summer 2022

- Developed my knowledge of cybersecurity principals and worked with various open-source tools and led a small team on a software development project in Python.

Education - Dulwich College

A-Levels : A* in Computer Science, A in Mathematics, A in Physics, A in an EPQ about the Right to Repair.

GCSES : 10 GCSEs ranging from an A to an A*

Activities and Interests

I love rock climbing and hill-walking. I really enjoy cooking and particularly blending different cuisines together.