

# Farhan Yusuf Khan

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## EDUCATION

**The University of Hong Kong**, Hong Kong  
Bachelor of Engineering in Computer Science

Sep 2022 - Jun 2026  
CGPA: 3.30

- Recipient of HKU Belt and Road Scholarship
- **Relevant Coursework:** Applied Deep Learning, Software Engineering, Artificial Intelligence, Machine Learning, Operating Systems, Data Structures and Algorithms, Data Science in R, Object Oriented Programming with Java, Database Management Systems, Macroeconomics

## EXPERIENCE

### Career Hackers

*GenAI Software Developer Intern*

Hong Kong  
Jun 2025 – Aug 2025

- Contributed to developing an AI-powered recruitment platform, integrating LLMs and automation tools to deliver intelligent candidate assessment features.
- Designed and delivered onboarding workflows, feedback systems, and admin dashboards, improving user engagement and streamlining recruitment operations.
- Implemented secure data handling pipelines using AWS S3 and optimized user experiences through streamlined data management processes.

### Teaching and Learning Innovation Centre, The University of Hong Kong

*Student Research Assistant*

Hong Kong  
Mar 2024 – Apr 2025

- Gathered research data for 500+ participants using platforms such as Amazon MTurk and Cloudresearch
- Analyzed gathered datasets with Python technologies (Pandas, NumPy) and Database Management technologies (Excel), ensuring quality control to bolster research initiatives.
- Conducted product testing and documented bugs for web applications in the education technology field

### Vidi Labs - Seekr

*Technology Intern - Impact Lab*

Hong Kong  
Feb 2025 - Apr 2025

- Enhanced scene detection model through data collection and labeling.
- Utilized manual and automated techniques, including Python-based web scraping and image processing tools to retrieve over 30000 data points.
- Conducted in-depth research to support business initiatives.

### Department of Computer Science, The University of Hong Kong

*Student Teaching Assistant*

Hong Kong  
Sep 2023 - Nov 2023

- Led 2-hour weekly tutorial classes for the ENGG1330 Course (Introduction to Computer Programming), where I taught python programming and problem-solving.
- Provided comprehensive explanations and guidance regarding programming problems, fostering student growth.
- Maintained a positive learning environment and promptly addressed concerns.

## PROJECTS

### Parallelbot

Mar 2024

Implemented a **C** inference engine for transformer-based **LLMs** by parallelizing matrix-vector multiplication and multi-head attention with a reusable POSIX pthread thread pool.

- Utilized **pthreads**, **mutex locks**, and **condition variables** to implement a reusable thread pool for dynamic task assignment and synchronization across mat-vec and attention computations.
- **Parallelized matrix-vector multiplication** by partitioning rows among threads and multi-head attention by distributing heads, achieving concurrent execution without race conditions.

### UniHaven – Student Accommodation Platform

Apr 2025

Developed a full-stack web application using **Django** to streamline student housing at HKU, following Agile methodology with iterative sprints and product backlogs.

- Implemented RESTful APIs with **Django REST Framework** for managing listings, reservations, and ratings; dynamically calculated geo-distances using government APIs.
- Designed a role-based access system for students and staff, supporting secure login, redirection flows, and permission-guarded actions.
- Followed **Agile principles**, executing sprint planning, backlog grooming, and continuous integration to ensure delivery of testable, incremental features.

## ADDITIONAL SKILLS AND EXPERIENCE

**Programming:** Python, C, C++, JavaScript, Typescript, Java, R, HTML, CSS, SQL, PHP

**Tools:** Pytorch, Tensorflow, sklearn, Matplotlib, Django, MySQL, MongoDB, ReactJS, Node.js, Three.js, Express.js, Swing