Farhan Yusuf Khan

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EXPERIENCE

Career Hackers — Hong Kong
GenAI Software Developer Intern — 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 — Hong Kong
Student Research Assistant — 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 — Hong Kong
Technology Intern - Impact Lab — 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 — Hong Kong
Student Teaching Assistant — 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 — May 2025
Implemented a **C** inference engine for transformer-based **LLMs** by parallelizing transformer operations 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.

EDUCATION

The University of Hong Kong, Hong Kong — Sep 2022 - Jun 2026
Bachelor of Engineering in Computer Science

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

ADDITIONAL SKILLS AND EXPERIENCE

Programming: Python, C, C++, JavaScript, Typescript, Java, R, HTML, CSS, SQL, PHP
Tools: Docker, AWS, Pytorch, sklearn, Matplotlib, Django, MySQL, MongoDB, ReactJS, Node.js