# 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: 3.51

Sunnydale School, Dhaka

Cambridge GCE A Levels: 4A\* in Further Mathematics, Mathematics, Physics, Chemistry

Jul 2019 - Jun 2021

#### EXPERIENCE

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

Hong Kong

Student Research Assistant

Mar 2024 – Present

- Appointed as a part-time Student Research Assistant under Prof. Luke Fryer for TALIC HKU
- Responsibilities include product testing, helping in technical aspects and helping with software development.

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

trudent Teaching Assistant

Hong Kong Sep 2023 - Nov 2023

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.

### Quantum Foundation

Dhaka, Bangladesh Apr 2022 – Jul 2022

IT Intern

- Worked on backend development with Pyramid and assisted in resolving website bugs.
- Worked in formatting digital files using ffmpeg-python
- helped implement multithreading to existing applications to improve performance and responsiveness.
- Contributed to backing up large file systems with Linux.

## AWARDS AND ACHIEVEMENTS

## **HKU Belt and Road Scholarship**

Sep 2022 - Jun 2026

Full Scholarship Recipient HK\$ 171,000 per annum.

## Bangladesh International Olympiad in Informatics

National Round Participant; Ranked 38th nationally.

Mar 2020

## **PROJECTS**

Cathay World Nov 2023

A prototype metaverse utilizing Unreal Engine and connecting with Microsoft OpenAI as part of the Cathay Hackathon. My contributions include:

- Implementing and configuring the chatbot using the capabilities of Microsoft Azure OpenAI.
- ullet Developing a website using **Flask** as the backend and **javascript** in the frontend.
- Use the backend to establish communication using **OpenAI API**, and relaying the response to the frontend using **HTTP Protocols**.

# Web Chat Application

Apr 2024

PHP-based web chat platform that allows users to register, log in, and exchange real-time messages with other users. It is built using PHP, MySQL, JavaScript, and AJAX technologies.

- User registration and login using "@connect" email addresses.
- Real-time messaging in the chatroom and client side validation

#### Flight Statistics Web Application

Mar 2024

Designed and developed a web application that retrieves and showcases passenger flight statistics from the Hong Kong Airport Open Data using REST web services.

- Utilized JavaScript and AJAX communication to fetch data from the REST web service and dynamically update the content.
- Extracted relevant flight information from JSON datasets based on user-selected dates.
- Made use of Open Data to gather relevant statistics and present total numbers of departure and arrival flights, unique destinations and origins, special cases, and histograms of flight distribution.

## Server-based TicTacToe game

Dec 2023

- Developed a server-based Tic Tac Toe game in Java, enabling multiple clients to play over a network.
- Designed and implemented server-side logic, graphical user interface (GUI), and client-server communication for a seamless gameplay experience.
- Documented the project and provided clear instructions for usage, demonstrating effective communication and attention to detail.

## SKILLS

- Relevant Coursework: Data Structures and Algorithms, Data Science in R, Object Oriented Programming with Java, Computer Programming I/II
- Programming: Python, C, C++, Java, R, HTML, CSS, JavaScript, SQL, PHP
- Tools: Flask, Pyramid, Django, Pandas, Numpy, Scipy, Matplotlib, tidyverse, beautifulsoup, java.swing, C++ STL etc.