Kyrene Chua



EDUCATION

National University of Singapore

Aug 2021 - May 2025 (Expected)

Bachelor of Engineering in Computer Engineering, Honours

Singapore

- Expected honours class: First Class
- Under the Engineering Scholarship Program
- Notable Coursework: CS2040C Data Structures and Algorithms in C++, CS2113 Software Engineering and Object-Oriented Programming, CS3244 Machine Learning, CS2102 Database Systems

Work Experience

Application Development Intern

May 2023 - Nov 2023

Defence Science and Technology Agency (Information Program Centre)

Singapore

- Designed and constructed various components of a robust data analytics system using Python, Numpy, and Panda libraries, encompassing data collection, database storage, data modelling, and knowledge representation, which was used by the department to analyse company data
- Integrated advanced machine learning and artificial intelligence modules to enhance data analytics capabilities, to boost efficiency of the system and quality of analytics
- Utilised Natural Language Processing (NLP) and other analytics tools to detect and access the virality of divisive issues and their influence on audience
- Developed a Question-Answer system using Generative AI, LLMs and Prompt Engineering concepts for the department to use with company data, decreasing the time taken to sieve through company data to find certain information

STEM (Coding) Undergraduate Intern

May 2022 - Aug 2022

OCBC Bank (Global Legal and Compliance)

Singapore

- Programmed a software for data entry automation which helped to reduce human error and time taken by almost 80%, using Visual Basic for Applications (VBA) Language
- Developed Excel Macros for data analysis and presentation for the Bank's yearly analysis of risk management data, which boasts efficient and accurate data collection and dashboard creation by using VBA
- Engineered a data migration and presentation system for the department using VBA, increasing the speed and accuracy of the data updates and charts creation by about 90%, hence assisting the department in their monthly meetings regarding the analysis of the Bank's data

NUS Engineering Outreach Program Teaching Assistant

Mar 2022 - May 2022

NUS Faculty of Engineering

Singapore

- Mentored in the teaching of the basics of the Arduino to 30 college students in Hwa Chong Institution by providing assistance as well as knowledge so that participants are able to build their own robot cars with the Arduino
- Worked in a team with a fellow course mate under 2 NUS Professors to teach participants
- Highly successful mentorship as measured by the 100% completion rate of participants

Technical Competencies and Certifications

Languages: C++/C, Python, Java, SQL, HTML, CSS

Developer Tools: Git, Docker

Libraries: NumPy, Pandas, Matplotlib, SciPy

Certifications: Deeplearning at Generative AI for LLM, MITx_6.81x Machine Leaning with Python