

CHENG YING XUAN

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EDUCATION

Bachelor of Science (Information Systems), Singapore Management University	2021 – 2025
<ul style="list-style-type: none">▪ Majoring in Business Analytics▪ Relevant Modules: Machine Learning, Data Mining, Information Retrieval, Big Data, Analytics Foundation, Intro to AI▪ Graduating GPA 3.52 / 4	
Diploma in Environmental Water Technology, Ngee Ann Polytechnic	2016 - 2019
<ul style="list-style-type: none">▪ Graduated as the Silver medalist	

WORK EXPERIENCE

Data Scientist Intern TE Connectivity <ul style="list-style-type: none">• Developed a multi-stage pipeline to predict PCB board Signal Integrity test results from component measurements• Trained YOLO models to segmentize ports & components to extract measurements• Fine-tuned the Unet-EfficientNet model with CAD images to improve accuracy & IoU for residue detection	Jan 2025 – Present
Data Analyst Intern Shopee <ul style="list-style-type: none">• Craft & schedule SQL queries to pull relevant metrics across multiple regions• Built Dashboards to track feature's post-launch performance.• Conducts root cause analysis when operation performance fluctuates	Sep – Dec 2023
Research Intern Twimbit <ul style="list-style-type: none">• Conducted sanitization of documents and tested ChatGPT integrated bot.• Assisted with research on Customer Service of APAC Telco companies.• Conducted focus group discussions, carried out web scraping and sentiment analysis on various brands for Gen Z article	May – July 2023
Teaching Assistant Singapore Management University <ul style="list-style-type: none">• Subjects: Web Application Development, AI & Humanity, Business Process Analysis & Solutioning• Mentored chatbots project for AI and Humanity.• Created Excel marco to reduce time taken to record class participation• Assist in clerical matters (grouping, quizzes, exams). Help students with HTML and PHP programming for WAD.	Jan – Nov 2023

SKILLS

Software: Tableau, Excel, Word, PowerPoint, Figma

Programing Languages: Python, SQL, Java, JS (React, Vue), PHP, HTML, CSS (Bootstrap)

Data Science Libraries: Tensorflow, Keras, Sklearn, Scikit-learn, Pandas, Matplotlib, Seaborn

Certifications:

- AI200: Applied Machine Learning by Heicoders Academy
- Oracle Certified Foundations Associate (Object Orientated Programming)

PROJECTS

Urban Forms Gen AI (Final Year Project)

Aug – Nov 2024

- Trained Graph VAE models on HDB shapefiles to generate potential HDB layouts.
- Fine-tuned hyperparameters & loss function to produce better results
- Utilized linear programming to find optimal building size & floor for specified density
- Project Outline: [Urban Forms Gen AI](#)

Data Analytics & Data Science Exploration

Current

- Pursuing Google Machine Learning Engineer Certification
- Created spark pipeline that cleans document text and ranks them based on query. Using spark functions (data portioning, accumulators, broadcasting) to maximize efficiency.
- Performed graph analysis on suicide watch subreddit to determine the nature of its users.
Link: [Subreddit Analysis.pdf](#)

SCDF-Dell hackathon 'Lifesavers' Innovation Challenge 2024 (Top 3)

May – Jul 2024

- Proposed tracking band that records firefighter's vitals to a dashboard in real time.
- Use LSTM model to predict risk of heart attack, heat stroke, etc.
- Coded the frontend using React. Built the ML and IoT microservices and deployed the project on Openshift.
- Link: [GetHelp Presentation.ppt](#)

Spreadsheets Analysis on Kangiten

Feb – April 2023

- Performed data cleaning, exploration and visualization on shopify data from Kangiten
- Analysis on recurring customers and influencing factors (country, product categories). Proposed advertising to grow business and projected potential income & customer growth through advertising.
- Link: [Kangiiten Presentation.pdf](#)

CO-CURRICULAR ACTIVITY AND COMMUNITY SERVICE

Feb 2023 – Jun 2023

Finance Secretary (Project Sunshine)

Assisted in finance matters for overseas trip to Laos. Did construction work and taught English & Math to primary and secondary school kids

Sep 2022 – Dec 2022

Mentor (Project Heartcode)

Mentoring secondary school kids. Taught web development (JS, HTML, CSS) and helped them build a website.

Dec 2021 – April 2022

Volunteer (KidsCount)

Come up with engaging lesson materials. Tutored lower income primary school kids math