# **CHEW WEI HONG**

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## Proficiencies

- Language
- Fluent in English and Chinese

#### Skills

- Machine Learning and Data Analytics : Python (NumPy, Pandas, Scikit-learn, PyTorch) and R
- Tools

- : Git, Docker, REST API
- Web Development
- Database Frameworks
- : Next.js, React, Tailwind, Typescript
- : Hadoop, Hive, Spark, SQL, NoSQL
- Other Languages
- : Java, C++

**Projects** 

## Social media analytics platform

- Led a team of 5 to design and develop the platform using Agile methodologies
- Developed a Python-based data pipeline to extract, transform, and load Instagram post and platform metrics from Meta APIs into a custom database.
- Created custom REST API endpoints acting as proxies for Pytrends and handling account onboarding.
- Designed and implemented project architecture and databases.
- Developed dashboards for visualizing performance metric in React, TailwindCSS and Next.js
- Dockerized and deployed the backend on Google Cloud.

### VGG model for Facial expression recognition

- Achieved a final accuracy of 77.7% after hyper- parameter tuning.
- Designed and implemented three VGG inspired models of varying depths using the FER2013Plus dataset
- Implemented pre-processing methods to ensure dataset consistency and suitability for the models
- Performed model evaluation using metrics like accuracy, AUC-ROC, and confusion matrices.

### E-portfolio

- Developed a visually appealing and responsive portfolio website using Next.js, Tailwind CSS, and TypeScript, showcasing the above-mentioned projects and skills.
- Implemented adaptive design principles to ensure an optimal viewing experience across various devices and screen sizes.

### **Work Experience**

### Membership Administrator

Plaza Bowlers Club, Temasek Club

- Streamlined membership enrollment process by implementing Google Forms, reducing human errors, and enhancing traceability.
- Efficiently handled transactions and fee collections for new member sign-ups, ensuring accurate record-keeping.
- Provided exceptional customer service by addressing member inquiries and resolving issues promptly, showcasing strong interpersonal skills

#### **Operation Support Officer**

Singapore Police Force, Woodlands Police Headquarters

- Contributed to operational planning and execution of simulation exercises, showcasing organizational and problem-solving abilities.
- Responsible for maintaining and tracking crucial inventory, ensuring operational readiness.

## Qualifications

## Bachelor of Computer Science (Big Data)

University of Wollongong

• Student council sub-committee (Welfare Department)

Oct 2022 - Oct 2024

Jul 2019 - Feb 2021

Aug 2023 - Apr 2024

backend on Google Cloud.