

# YAP WEI HAU

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# **SKILLS & ABILITIES**

Familiar with programming (Python, C#, NI LabVIEW)

Data Manipulation & Visualization (Numpy, Pandas, Matplotlib, MySQL)

Machine Learning/Deep Learning (PyTorch, Sci-kit Learn, Neural Network, Transformer)

Exposure to web app deployment on Cloud (Streamlit, Heroku, Render)

# **NOTABLE PROJECTS**

May 2023	· Multi-horizon Time Series Sales Forecasting with Deep Learning • Personal Project
	· Built a Temporal Fusion Transformer (TFT), a Transformer-based model
	· Data cleaning and data preparation from scratch based on PyTorch TimeSeriesDataSet format
	· Demonstrated the interpretability of the attention-based DNN model through data visualization
April 2023	· Movie Recommender with Ranking System • Personal Project
	· Built a Collaborative Filtering based recommendation system
	· Integrated ranking algorithm in terms of similarity score to further enhance the system
	· Tweaking the parameters in the ranking algorithm to optimize the performance
	<ul> <li>Deployed the interactive web app and hosted onto the cloud using Render</li> </ul>
Jan 2023	· Wine Cultivars Class Classifier Model • Personal Project
	· Ran exploratory data analysis (EDA) on the two datasets from Kaggle
	· Merged two different datasets and trained Machine Learning model to predict wine cultivars
	<ul> <li>Deployed the interactive web app and hosted onto the cloud using Render</li> </ul>
Oct 2022	· Optical Character Recognition using Neural Networks • Personal Project
	<ul> <li>Integrated neural networks architecture and trained a model that can recognize handwritten digit MNIST database</li> </ul>
	<ul> <li>Reuse the trained model (Transfer Learning) for another new model to handle real time handwritten digit recognition</li> </ul>
June 2020	· Security Analysis and Construction of Confidence Bits on a Secured Iris Recognition System • Final Year Project
	<ul> <li>Enhanced iris recognition system by generating an additional layer of confidence on the CASIA iris dataset</li> </ul>

impostor comparisons through FAR and FRR

· Performance evaluation between initial model and enhanced model by performing genuine and

## CAREER EXPERIENCE

#### Mar 2022-Present

- · RnD Data Analyst Akribis Systems Pte Ltd
- · Utilizing Python libraries (Numpy and Pandas) for Data Cleaning and Data Manipulation of all test data sets before storing into MySQL local database
- Implemented Data Mining solution to business problems such as product recommendation to end customers
- · Presented product's insights through Data Visualization using Seaborn/Matplotlib to manager for product improvement
- · Developed data pipeline between Tulip cloud web app and MySQL, allowing two way interactions
- · GitHub implementation for CI/CD

### June2020 - Feb2022

## · Software Engineer • Fuji Master Engineering Sdn Bhd

- Front-end and Back-end software development with real time Data Cleaning and Data Logging feature in MySQL DBMS
- · Ensured data integrity and resolved data errors before system deployment
- · Ensured and maintained the security of database in the production environment
- · Python OpenCV for in house Vision System development

#### Oct 2018 - Jan 2019

## · Internship at Injection Molding and Precision company

- · Data collection from machines to analyze the performance of products
- · Performance evaluation through Process Capability Index (Cpk) methodology
- · Fatigue test of products through Gage Repeatability and Reproducibility (R&R)

#### **FDUCATION& CERTIFICATES**

June 2016-June 2020

Bachelor of Engineering (Honours) Mechatronics Engineering, Universiti Tunku Abdul Rahman, Malaysia

CGPA: 3.4665

Relevant Coursework: Fuzzy Logic in Artificial Intelligence, Image processing and objects detection

Oct 2019

**UTAR Academic President's List** 

Oct 2017, May 2018, Jan

2019

UTAR Academic Dean's List

## **CO-CURRICULAR ACTIVITIES**

## June 2017

## **ICE SC Leadership and Team Building Camp**

- · Improve my communication skills with new friends as well as boosting my self-esteem
- · Learn to work with peoples from different universities, thus building teamwork

- · Fluent in English, Mandarin, Malay and German (A1 Level)
- Passionate in self-improvement in various aspects, e.g., participating in Coursera and Udemy courses.