

Tan Yee Fan

+60-126561648 | yeefantan1999@gmail.com
[linkedin.com/in/yeefan](https://www.linkedin.com/in/yeefan) | <https://yeefantan.github.io>

EDUCATION

Monash University <i>Doctor of Philosophy (Ph.D.)</i> Supervisor: Assoc. Prof. Ting Chee Ming, Dr. Fuad Noman, Prof. Raphael Phan	Selangor, Malaysia <i>April 2022 – Present</i>
Multimedia University <i>Bachelor of Computer Science (Hons) Artificial Intelligence</i> CGPA: 3.97 / 4.0	Melaka, Malaysia <i>November 2019 – January 2022</i>
Multimedia University <i>Diploma in Information Technology</i> CGPA: 4.0 / 4.0	Melaka, Malaysia <i>July 2017 – October 2019</i>

EXPERIENCE

Research Assistant <i>Monash University</i> <ul style="list-style-type: none">Conducted a research on predicting individual differences in behavior based on brain connectivity networks under the supervision of Assoc. Prof. Ting Chee MingConducted the literature review and experimental studies using CNN for brain disorders classification	November – December 2021 MY
Undergraduate Research Assistant <i>Multimedia University</i> <ul style="list-style-type: none">Conducted a research on predictive modelling for Digital Signage Advertising under the supervision of Dr. Ong Lee Yeng and Dr. Leow Meng ChewInvestigated different models for time-series forecasting, including Statistical, AI, and Hybrid modelsPublished a review paper, which introduced seven different models for dynamic pricing, proposed a framework for optimal model selection based on the data characteristics analysis	February – August 2021 Melaka, MY
Research Assistant <i>Multimedia University</i> <ul style="list-style-type: none">Worked as a team under the supervision of Dr. Ong Lee Yeng and Dr. Leow Meng ChewApplied web crawling and scraping techniques to gather useful data for experimental studyDesigned the experiments which applied a rule-based system for DOOH dynamic pricing, by considering the importance of each independent variable using Machine Learning models	October – November 2020 Melaka, MY
Peer Tutor <i>Multimedia University</i> <ul style="list-style-type: none">Held the tutor position for the subject of Mathematical TechniqueIn charge of preparing relevant materials and contents to conduct the tutorial section for the subject	November 2018 – March 2019 Melaka, MY

RESEARCH AND DEVELOPMENTAL PROJECTS

Automatic Handwritten Text Recognition for Medical Application <i>Deep Learning</i> <ul style="list-style-type: none">Final Year Project, supervised by Assoc. Prof. Dr. Tee Connie and Assoc. Prof. Dr. Goh Kah Ong MichaelData collection: A different set of receipt templates were distributed to the public in acquiring different handwritten styles, obtained a sample size of 500Applied various data pre-processing methods before training, including skew correction, line removal, line segmentation, and data augmentationProposed a framework to tackle the following problems: printed/handwritten text identification, OCR and HCR models, information classification modelInvolved models: YOLOv5, Transformer, CNN, ResNet, LSTM, RNN, Bi-LSTM/RNN, NERThe proposed ResNet-101T has obtained an outstanding performance, with an WER and CER of 9.29 and 6.12	June 2020 – September 2021
Explainable Health Prediction with Transfer Learning <i>Deep Learning</i> <ul style="list-style-type: none">A proposed research with aims to distinguish between healthy and sick faces, and to obtain explanation from black-box models, supervised by Assoc. Prof. Dr. Tee ConnieVarious experiments were investigated to tackle the problems of insufficient dataset, including data augmentation, GAN, and Transfer LearningA VGGFace model is trained, by applying transfer learning, achieved an accuracy of 0.97 in classifying the imagesApplied various Explainable AI (XAI) techniques: LIME, XAI, IG to get model's explanation in making a decision, each techniques provides a reasonable explanation in highlighting the corresponding regions	June – November 2020

AWS Hackathon Build On Malaysia (Finalist Top 50) | Python, Git, AWS

June – September 2020

- A hackathon held by Amazon Web Services, our proposal was selected as Top 50 Finalist
- Worked in a team to build a smart cane prototype for visually impaired group by integrating various AWS services, considering the safety and practicality from different aspects
- Applied AWS services for tasks such as Object Recognition, Voice Recognition, Emergency Message, and others

Funtastic Event - Web-based Application | HTML/CSS, JS, PHP, MySQL

April – November 2019

- Final Year Project of diploma, a full stack web-based application to enable users to hold an event through the platform
- Grade received: A

PUBLICATION**A Pipeline Approach to Context-Aware Handwritten Text Recognition**

Y. F. Tan., T. Connie, M. K. O. Goh., & A. B. J. T. (2022). A Pipeline Approach to Context-Aware Handwritten Text Recognition. Applied Sciences, 12(4), 1870. <https://doi.org/10.3390/app12041870>.

Explainable Health Prediction based on Facial Features using Transfer Learning

T. Connie, Y.F. Tan, M.K.O. Goh, H.W. Hon, Z. Kadim, L.P. Wong, Explainable health prediction from facial features with transfer learning, Journal of Intelligent & Fuzzy Systems. Preprint (2021) 1–13. <https://doi.org/10.3233/JIFS-211737>.

Exploring Time-Series Forecasting Models for Dynamic Pricing in Digital Signage Advertising

Y.-F. Tan, L.-Y. Ong, M.-C. Leow, Y.-X. Goh, Exploring Time-Series Forecasting Models for Dynamic Pricing in Digital Signage Advertising, Future Internet. 13 (2021). <https://doi.org/10.3390/fi13100241>.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, HTML/CSS, JavaScript, PHP, Laravel, MySQL, CLIPS, LISP, Prolog, LaTeX

Developer Tools: Git, VS Code, Google Cloud Platform, Amazon Web Services

Operating System: Mac, Window

Office and Multimedia Tools: Microsoft Office, Adobe Illustrator, Adobe Premiere Pro

Linguistic: English, Mandarin, Bahasa Malaysia

VOLUNTEER EXPERIENCE / LEADERSHIP**Orientation Series, CLS | Assistant Director, Creative and Design Division**

January – September 2019

- In charge of multimedia designs for publicity in MMU, to promote the event held by CLS
- Designed the member card of CLS for year 2019, with more than 1000 members registered

Chinese Language Society | Director, Activity of Recreational Division

January – November 2018

- Led a group comprised of approximately 30 people to hold an event in the campus
- In charge of tasks distribution and roles assignment to get works done with a higher efficiency

AWARD / CERTIFICATION

Dean List Award: Received award in degree for five semesters and in diploma for six semesters at Multimedia University

Best Diploma Student in Information Technology: Received full scholarship for Bachelor Degree Studies

Huawei Certification: HCIA-AI

Data Science 360: A certification program from LEAD

REFERENCES**Assoc. Prof. Dr. Tee Connie**

Lecturer, FYP Supervisor,
FIST, Multimedia University.
+606-2523592
tee.connie@mmu.edu.my

Dr. Ong Lee Yeng

Lecturer, Internship Supervisor,
FIST, Multimedia University.
+606-2523761
lyong@mmu.edu.my

Dr. Lim Kian Ming

Lecturer, Academic Advisor,
FIST, Multimedia University.
+606-2523066
kmlim@mmu.edu.my