Chun Chet Ng

🗖 +60124202083 | @ ngchunchet95@gmail.com | 🛅 LinkedIn | 🗘 GitHub | 🚱 Website | 🗣 Kuala Lumpur, Malaysia

EDUCATION

University of Malaya

Kuala Lumpur, Malaysia

Ph.D. in Artificial Intelligence (Computer Vision)

Sept. 2018 - DEC 2023 (Expected)

Tunku Abdul Rahman University of Management & Technology

Kuala Lumpur, Malaysia

Bachelor of Computer Science (Honours) in Software Engineering: CGPA: 3.97/4.00

May. 2015 - May. 2017

Diploma in Science (Computer Science and Mathematics); CGPA: 3.97/4.00

May. 2013 - May. 2015

Research Experience

University of Malaya

Kuala Lumpur, Malaysia

Research Assistant

Sept. 2018 - Present

- Under the supervision of Prof. Chan Chee Seng from the Centre of Image and Signal Processing Lab.
- Researching on the scene text detection, recognition and spotting methods. With also studies on low-light image enhancement-related works. Proposed a few notable scene text datasets, including the introduction of novel text datasets such as ArT, EST-VQA, and ICText.

Work Experience

AkiraKan Limited

Kuala Lumpur, Malaysia

Part Time ML/AI Research Scientist (3D & AI)

Jan. 2023 - Present

• Handling OCR-related projects including lamp post ID extraction and license plate recognition based on traffic scene images.

ViTrox Corporation Bhd.

Penang, Malaysia

Research Intern

Mar. 2020 - Dec. 2022

- Interned at the Centre of Excellence department and worked on industrial OCR problems. Specifically, the study of OCR methods in industrial use cases to detect and recognize defective characters accurately on chip images.
- Organized an international OCR competition, ICDAR 2021 RRC ICText together with Baidu and a few partner universities. Leading to the creation of the largest Integrated Text on Chips Dataset (ICText).
- Proposed a novel curriculum-learning-based training strategy to improve character recognition methods' performance on the ICText dataset where most of the images contain texts with aesthetic defects such as low contrast, blurry and broken. Two publications are the output of this research project.
- Supervised a few undergraduate interns to work on image classification and object detection projects.

Theta Service Partner Sdn. Bhd.

Kuala Lumpur, Malaysia

Feb. 2017 - Aug. 2017

Intern Software Engineer

• Joined the Centre of Excellence department to work on the bank loan software system. I was mainly responsible for bug fixing, implementing customers' requirements, and writing test cases. The tech stack involves Angular as the front-end framework with C# and Java as the back-end.

Volunteer Experience

Software Engineer

Dharma Drum Mountain Buddhist Centre

Kuala Lumpur, Malaysia

2017 - Present

- Completed an internal E-receipt system to keep track of all received donations and payments.
- Created an e-commerce website to allow the selling of books online and the acceptance of online donations.
- Setup and migrated the legacy email systems to GSuite for NGO. These upgrades have greatly improved their workflow and services during the COVID-19 pandemic.
- Periodic update and maintenance of all IT software and systems.

Dhamma Earth Malaysia

Kuala Lumpur, Malaysia

IT Volunteer

2019 - 2020

- Initial setup of the organization's main website.
- Developed a web application to keep track of allowable requisites (the accounts of Buddhist monks and nuns).

Last updated Apr. 2023

Page 1 of 2

Perfect Half Million Beauty Product Image Recognition Challenge 2018: Ranked 4th out of 13 teams. Implemented Mask-RCNN and carry out feature extraction using various CNN models.

HACK2HIRED Software Hackathon 2017: Represented my team to present to panel judges and won second runner-up as a team. Implemented a production line monitoring system within 24 hours.

Pecipta 2017: Won a Bronze Medal with my Bachelor's Degree's Final Year Project, titled "Malaysia's Car Plate Recognition System". I am the leader of a team with 4 members where I implemented a license plate recognition algorithm using KNN and the proposed method outperforms the existing methods significantly.

Hilti's FYP Competition 2016: Won Second Runner Up with "Malaysia's Car Plate Recognition System".

TARUMT'S FYP Showcase 2016: Won First Runner Up with "Malaysia's Car Plate Recognition System".

Bachelor Degree & Diploma: President's Award Winner as the best graduate for the year of 2017/2018. Book Prize Award Winner for diploma and degree (highest CGPA). President's List for every semester during diploma and degree.

Research Publications - Conference Papers

- (1) Hsu, Po-Hao*, Che-Tsung Lin*, **Chun Chet Ng***, Jie Long Kew, Mei Yih Tan, Shang-Hong Lai, Chee Seng Chan, and Christopher Zach. "Extremely low-light image enhancement with scene text restoration." In 2022 26th International Conference on Pattern Recognition (ICPR), pp. 317-323. IEEE, 2022.
- (2) Chun Chet Ng, Akmalul Khairi Bin Nazaruddin, Yeong Khang Lee, Xinyu Wang, Yuliang Liu, Chee Seng Chan, Lianwen Jin, Yipeng Sun, and Lixin Fan. "ICDAR 2021 Competition on Integrated Circuit Text Spotting and Aesthetic Assessment." In Document Analysis and Recognition–ICDAR 2021: 16th International Conference, Lausanne, Switzerland, September 5–10, 2021, Proceedings, Part IV 16, pp. 663-677. Springer International Publishing, 2021.
- (3) Wang, Xinyu, Yuliang Liu, Chunhua Shen, **Chun Chet Ng**, Canjie Luo, Lianwen Jin, Chee Seng Chan, Anton van den Hengel, and Liangwei Wang. "On the general value of evidence, and bilingual scene-text visual question answering." In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, pp. 10126-10135. 2020.
- (4) Chng, Chee Kheng, Yuliang Liu, Yipeng Sun, **Chun Chet Ng**, Canjie Luo, Zihan Ni, ChuanMing Fang et al. "Icdar2019 robust reading challenge on arbitrary-shaped text-rrc-art." In 2019 International Conference on Document Analysis and Recognition (ICDAR), pp. 1571-1576. IEEE, 2019.
- (5) Sun, Yipeng, Zihan Ni, Chee-Kheng Chng, Yuliang Liu, Canjie Luo, **Chun Chet Ng**, Junyu Han et al. "Icdar 2019 competition on large-scale street view text with partial labeling-rrc-lsvt." In 2019 International Conference on Document Analysis and Recognition (ICDAR), pp. 1557-1562. IEEE, 2019.
- (6) Lim, Jian Han, Nurul Japar, **Chun Chet Ng**, and Chee Seng Chan. "Unprecedented usage of pre-trained CNNs on beauty product." In Proceedings of the 26th ACM international conference on Multimedia, pp. 2068-2072. 2018.

REVIEW EXPERIENCES

- AAAI 2022, 2023.
- PR 2022.
- CVPR 2021, 2022.
- ECCV 2022.
- ICCV 2021.
- BMVC 2021.
- ICDAR 2019, 2021.

SKILLS

Programming: Python, C#, Java, SQL

Technologies: PyTorch, NumPy, Matplotlib, Pandas, TensorFlow, Django Languages: Mandarin (Native), English (Professional), Malay (Fluent)

SUPPLEMENTARY AI CERTIFICATES

MOOC: Coursera Andrew Ng's Machine Learning, Deep Learning Specialization, DeepLearning.AI Tensorflow Developer Summer Schools: Southeast Asia Machine Learning School 2019, Oxford Machine Learning Summer School 2022

^{*}Indicates equal contribution.