Jun Chuan **Chiew**

Senior Software Engineer · Computer Vision Enthusiast

(+886) 968633304 | kyoyachuan0626@gmail.com | kyoyachuan | kyoyachuan0626

Summary

- Expertise in Computer Vision, Deep Learning, Autonomous Perception, Depth Estimation, Sensor Fusion.
- Extensive experience in Machine Learning Product's Implementation, including Object Detection and Classification, Recommendation System.
- Proficient in Python, NodeJS programming, and DevOps tools, including Docker, Kubernetes, Github Actions.
- Good at Data Analysis and Statistic.

Education

NYCU(National Yang Ming Chiao Tung University) — *Hsinchu, Taiwan*

Ph.D in Computer Science and Engineering — *Feb. 2022 - Jun. 2026*

- Aug. 2023, forward from the M.S. to Ph.D. program

NCCU(National Cheng Chi University) — *Taipei, Taiwan*

B.S. in Risk Management and Insurance — *Sep. 2012 - Jun. 2016*

- Presidential Awards
- Passed Society of Actuaries (SOA) Exam Probability & Financial Mathematics

Experience

ASUS AICS — *Taipei, Taiwan*

Senior Software Engineer — *May. 2020 - Feb. 2022*

- Leaded team to design, implement advertising recommender backend system in news media platform, which support over than 1k QPS, 5ms P99 response time and achieved 0.6% CTR, by using Azure Kubernetes, NodeJS and Redis.
- Developed cross device tracking model, which achived 0.75 F1-score, and data pipeline to process and inference 20 millions of web logs within 5 hours per day, by using Azure Databricks and Apache Spark.

Umbo Computer Vision Inc. — *Taipei, Taiwan*

AI Engineer — *Aug. 2019 - May. 2020*

- Developed deep learning training pipeline with Kubeflow Pipeline, GKE & TWCC, to scale up capacity and efficiency of model production.
- Studied and evaluated false alarm filter algorithm, to improve precision of product and to support over ten thousand events.
- Maintained CV services & tracking business application (Tailgating), including builed monitoring system pipeline, to support thousand of camera streams.

Viscovery Co., Ltd. — *Taipei, Taiwan*

Computer Vision Engineer — *May. 2018 - Aug. 2019*

- Developed smart-checkout system with the algorithms including Metric Learning, Object Detection & Segmentation, to more than 5 clients and more than 5 demo exhibition, with over 0.9 accuracy.
- Leaded a 2-person team to work on Bread Recognition algorithms, such as bread's topping augmentation, hierarchical & fine-grained classification and instance segmentation.
- Implemented cut-paste based data generation tools with tranditional computer vision algorithms, including contour extraction, data augmentation, bluring and color space processing, to increase quantity and variety of training data, while reduce cost of data collection.
- Studied, and evaluated new and the cutting-edge method, especially Generative Model, to improve feature representation and performance of new products recognition in smart-checkout system without retraining model.

Academia Sinica | Taiwan AI Academy — *Taipei, Taiwan*

Research Assistant — *Jul. 2016 - Apr. 2018*

- Implemented more than 10 Machine Learning Projects to clients, for example, using text mining and XGBoost to model book sales prediction with 0.77 F1-score and applying multi-label classification and deep neural network to model dye selection and optimization with 0.99 Top-10 Accuracy.
- Leaded a 5-person team to work on Governance satisfaction analysis with App's data, such as apps logs preprocessing, text mining, data analysis, regression model.
- Preprocessed and analyzed more than 100 millions / 100GB scales of data, for example, e-commerce's transaction logs, and applied Apriori algorithm on it to figure out which products or categories combination was the best seller.
- Taught more than 200 students in the courses of Deep Neural Network, Convolutional Neural Network, Natural Language Preprocessing, and assisted them to work on Machine Learning Projects, for example, using text mining to model artical classification and applying XGBoost and LSTM to model stock price prediction.
- Consulted several departments and companies to define Machine Learning application fields.

Skills

Computer Vision and Deep Learning	Depth Estimation, Sensor Fusion, Optical Flow Estimation, Object Detection
Programming Language	Python, NodeJS, R, C++
Machine Learning Tools	PyTorch, Keras, Tensorflow, Spark
DevOps Tools	Docker, Kubernetes, Github Actions, Jenkins, GCP, AWS, Azure