

Chang-Ju Lee

Software & Deep Learning Engineer / Violinist

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 LilG-Cheng-Ju
 Cheng-Ju (Clement) Lee
 <+ your phone number>

EXPERIENCE

Software Engineer

AI Solution BU, ASUS, Taipei *February 2023 ~ Present*

- Built a real-time AI safety monitoring platform for streaming video analysis, increasing incident detection accuracy to 95% and significantly reducing manual monitoring costs.
- Implemented and optimized object detection, segmentation, tracking, and pose estimation algorithms, reducing pre- and post-processing time by up to 93% and continuously improving model precision by up to 0.12 mAP@50:95.
- Leveraged MLOps and CI/CD practices with Kubernetes to efficiently deploy AI models via Nvidia Triton, optimizing deployment pipelines and boosting GPU resource utilization by 1.6x.
- Handled large-scale project tasks including version control, vulnerability fixes, and code encryption.
- Continuously improved Python programming capabilities, including object-oriented design, asynchronous programming, and design patterns. Refactored core components of departmental products, reducing system resource usage by up to 24%.
- Acted as a bridge between PMs and the development team, translating complex technical concepts into actionable business insights, ensuring smooth project execution and reducing miscommunication.

Project Manager (Official title: Project Planner) & AI Engineer

Environmental Management Consultants Technologies (Emct), Taipei *August 2021 ~ January 2023*

- Led the development of an AI inference service on GCP for the National Palace Museum, supporting 500+ concurrent users, from concept to deployment.
- Containerized API services with FastAPI/Flask, enhancing scalability and simplifying deployment pipelines.
- Applied multi-task/label learning and model quantization techniques to improve model inference speed by 80% while maintaining accuracy, optimizing resource usage.
- Managed project lifecycle and technical execution, designing intuitive UI/UX with **Figma** and coordinating cross-functional teams via **ClickUp** to streamline delivery from concept to launch.

EDUCATION

Master of Science in Surveying and Geomatics

National Chung Hsing University, Taichung *July 2019 ~ July 2021*

- **Advisor:** Ming-Der Yang, Advanced Image Processing and Application Lab. (AIPal)
- **Fisrt Author:** *Single-plant broccoli growth monitoring using deep learning with UAV imagery.*
- Relevant Coursework: Image Processing, Machine Learning, Remote Sensing, Precision Agriculture | **GPA: 3.86**

Bachelor of Science in Civil Engineering

National Chung Hsing University, Taichung *September 2013 ~ June 2018*

- Concertmaster (Principal Violin) of the school's symphony orchestra

LEADERSHIP & ACTIVITIES

- **Student Conductor & Concertmaster, School Symphony Orchestra**
Led and conducted over 60 members in various performances; previously served as concertmaster.
- **Violinist, National Taiwan Symphony Orchestra, Taipei Philharmonic, and others**
Currently performing in several prestigious orchestras in Taiwan.
- **Organizer & Performer, Chamber Music Group**
Organized and performed over 20 classical music concerts in rural Taiwan, bringing live performances to children.

SKILLS

Programming: Python (Advanced), C++ (Basic), Golang (Basic), \LaTeX **OS:** Windows, Linux

Framework & Package: Pytorch, Tensorflow, Onnx, Opencv, Scikit-image, FastAPI, Gstreamer, RabbitMQ, Celery

Tools: Git, Docker, Kubernetes, Nvidia Triton, GCP, Azure, Figma, ClickUp

Others: Project Management, UI/UX Design, GIS, GPS, Communication Skills, Presentation Skills

Language: Chinese (Native), English (Fluent)