

Yi-Ting Lee

lucalee207@gmail.com | (689)-867-4182 | www.linkedin.com/in/yiting-lee-tw | <https://github.com/LucaLee207>

Education

Texas A&M University, GPA 4.0/4.0

Master of Computer Science

08/2023 - 12/2025

College Station, TX

- Coursework: Software Engineering (Ruby/Rails), Machine Learning (Python/PyTorch), Parallel Computing (C++/OpenMP), Artificial Intelligence, Databases and Computational Tools Used in Big Data (Docker/SQL/NoSQL/Docker), Network Security

National Taiwan University

Bachelor of Science in Materials Science and Engineering

09/2018 - 01/2023

Taiwan

- Coursework: Object-oriented Software Design (Python/OOP), Data Structure and Algorithms (C), Algorithm Design and Analysis (C++), Computer Architecture (Verilog), Operating System, Linear Algebra and Its Application, Discrete Mathematics

Skills

- **Programming Languages:** C/C++, C#, Python, Ruby, JavaScript, SQL
- **Technologies:** Git/GitHub/GitLab, Linux, Docker, Unity, AWS, CI/CD, RSpec, Cucumber
- **Web Development:** HTML/CSS, Bootstrap, APIs, PostgreSQL, Node.js, Express.js, React.js, Rails
- **Knowledge:** Data Structure, Algorithm, Machine Learning, Software Engineering

Work Experience

Department of Computer Science & Information Engineering - National Taiwan University

Project Assistant - Image and Vision Laboratory

09/2022 - 04/2023

Taiwan

- Developed the integration of three innovative features into Augmented Reality application Tai-Chi learning system and redesigned the user interface using Unity and C#.
- Identified, diagnosed, and resolved compatibility challenges between the Tai-Chi learning system, Mixed Reality Toolkit, and HoloLens2, streamlining the project timeline by 20%.
- Collaborated with other software engineers using GitLab for version control to maintain and develop the application, conducted code reviews, and documented issues.
- Designed the algorithm and mechanism for the Virtual Reality project, resulting in 82% positive user feedback.

Selective Projects

Personal Website

06/2024 – present

HTML / CSS / JavaScript / AWS / Kubernetes / Docker

- Hosted the personal website on Kubernetes and AWS infrastructure, Dockerized and deployed it on DockerHub, then launched it on Amazon EKS and exposed it via ALB.
- Presented skills, experience, education, and projects to visitors using interactive elements, crafting a compelling online portfolio that highlights technical expertise.

Synergistic Leadership Theory Website

02/2024 – 05/2024

Ruby / Rails / HTML / CSS / JavaScript / Testing / Github

- Collaborated within a team environment to develop a full-stack website using Ruby on Rails, from inception through deployment on Heroku, while implementing CI/CD practices.
- Achieved 95% test coverage using RSpec and Cucumber, effectively implementing both TDD and BDD practices.
- Facilitated Agile methodologies as a Scrum Master, utilizing Pivotal Tracker for project management, and organized regular meetings with team members and clients to ensure project alignment and track progress.

Handwritten Digit Recognition

04/2024 – 05/2024

Python / PyTorch / CNN / RNN

- Developed CNN and RNN models for processing image and audio data based on the MNIST handwritten digit dataset.
- Concatenated embeddings from two modalities to augment the feature representation, without fixing the combination weight of the embeddings, thereby preserving the flexibility and adaptability of the multimodal deep learning framework.
- Achieved 99.64% accuracy on validation data and reached 99.5% accuracy on the up-to-date test data.

Parallelizing Strassen's Matrix-Multiplication Algorithm

11/2023 - 12/2023

C++ / OpenMP / Linux

- Designed and Implemented parallel algorithm for Strassen's matrix multiplication using OpenMP with 8 threads.
- Achieved a speedup of 24.72 and an efficiency of 3.09 by designing a parallel algorithm and utilizing TAMU High Performance Research Computing resources.