SUNNY (PIN-TZU) LEE

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EDUCATION

MS. in Computer Science — Los Angeles, CA
University of Southern California (USC) — Aug 2023-May 2025
- GPA: 3.93/4.0

BS. in Computer Science — Hsinchu, Taiwan
National Yang Ming Chiao Tung University (NYCU) — Sep 2019-June 2023
- GPA: 3.84/4.0 (3.95/4.3)

AWARDS

Best Data Science Team Leader at DataFirst Fall 2023 — Dec 2023
- Led a team of 4 members working on the Pyleoclim project and was awarded the prize at the DataFirst Fall 2023 event

Certificate of Excellence in 1st Semester of 2022 Academic Year at NYCU — May 2023
- Ranked 1st among 200+ students in the Department of Computer Science, resulting in the honor of being awarded the prize

1st Place at Hackathon Taiwan Junior 5th — July 2019
- Designed and implemented a mystery game utilizing Unity, distinguishing the project as the top performer among 20+ participating teams and securing the 1st place

PROJECTS

Stock Search Responsive Web App and Android App
HTML, CSS, Angular, Node.js, Express, MongoDB, Android, Flask, TypeScript, Java, JavaScript, Python, Google Cloud Platform (GCP)
- Designed and deployed a responsive stock search web application using the MEAN stack, hosted on Google Cloud Platform, alongside a complementary Android app
- Integrated real-time stock price updates, financial news, interactive historical charts, and personalized watchlists by connecting to third-party APIs, enhancing user engagement across platforms
- Optimized cloud-based deployment for scalability and reliable performance, ensuring seamless integration between the web and mobile versions, with responsive design for a smooth user experience

Pyleoclim: Python Package for the Analysis of Paleoclimate Data
Python, Machine Learning, Unsupervised Learning, Open Source
- Enhanced the open-source Pyleoclim package by integrating Local Outlier Factor (LOF) for improved anomaly detection, aiding researchers in analyzing complex paleoclimate datasets
- Contributed to "PyleoTutorials: A Gentle Introduction to the Pyleoclim Package," improving documentation and creating user-friendly tutorials to facilitate broader adoption and ease of use for new users

Advanced Soccer Match Prediction with Graph Neural Networks
Python, Machine Learning, Neural Network, Graph Neural Network, PyTorch
- Developed a Graph Neural Network (GNN) model in PyTorch to predict soccer match outcomes, leveraging player abilities and team formations across data from 300+ teams and 3,600+ players
- Achieved a 10%-30% improvement in prediction accuracy by incorporating complex player interactions and team dynamics, enhancing the model's understanding of match outcomes

WORK EXPERIENCE

ASML (via Acara Solutions) — San Diego, CA
NI LabVIEW Programmer Intern — May 2024-Aug 2024
- Integrated new PicoScope hardware into the existing virtual oscilloscope program, replacing obsolete models and reducing operation time by 95%, increasing testing efficiency.
- Modularized hardware code into the DQMH framework, enhancing reusability and collaboration, which decreased code duplication by 40%
- Gained significant technical and soft skills, contributing to a poster session to showcase project achievements

SKILLS

- Programming: Python, C/C++, HTML, CSS, JavaScript, Java, Android, Angular, Node.js, SQL, Spark

- Tech: Git, Github, Jira, SVN, Google Cloud Platform (GCP)
- Languages: Chinese (Native), English (Fluent), Japanese (Fluent), Korean (Basic)