

Peng-Jui (James) Wang

☎ +1 (858) 214-8220 | ✉ james900425@gmail.com | 🏠 pjwang.info | 📺 james5418 | 🌐 pjwang

Education

University of California, San Diego

La Jolla, CA

Master of Science in Computer Science

Sep. 2024 - Dec. 2025

- GPA: **3.97/4.0**
- Relevant Coursework: Databases, Network Systems, Computer Architecture, Algorithm Design and Analysis, Machine Learning

National Yang Ming Chiao Tung University

Hsinchu, Taiwan

Bachelor of Science in Computer Science

Sep. 2019 - Jun. 2023

- GPA: **4.1/4.3**; Academic Achievement Award (Top 5% of the class)
- Relevant Coursework: Data Structures, Algorithms, Object-Oriented Programming, Operating Systems, Distributed Systems, Cloud Computing, Parallel Computing, Computer Networking, Computer Security, Computer System Administration

Work Experience

LinkedIn, Systems & Infrastructure Engineering Intern

Sunnyvale, CA

Python | Apache Iceberg | Apache Arrow | Ray | Flyte | OpenHouse | Hadoop Distributed File System (HDFS)

Jun. 2025 - Sep. 2025

- Developed a Python library integrating with Iceberg and HDFS to stream data from databases into ML training workflows
- Eliminated over 40000 TB of compute usage by replacing legacy data loaders, saving roughly \$3 million in hardware costs
- Partnered with the ML team to plug the new library into PyTorch and TensorFlow pipelines within Flyte for distributed training

Appier, Software Engineer Intern

Taipei, Taiwan

Python | FastAPI | Flask | TypeScript | React.js | GraphQL | Docker | Jenkins | Elastic Stack | GCP | AWS

Jul. 2023 - Jun. 2024

- Built a scalable and fault-tolerant notification microservice handling 10000+ messages daily based on the Pub/Sub model
- Developed a dashboard with 5 engineers for over 400 employees to track and manage the company's advertising business
- Boosted overall system observability by integrating Elastic APM and OpenTelemetry for end-to-end performance monitoring
- Created Jenkins pipelines for 10+ developers to set up dev environments and databases, reducing human intervention by 90%
- Optimized frontend performance by utilizing virtualized rendering for large-scale tabular data, decreasing load times by 50%

Shopee, Backend Engineer Intern

Taipei, Taiwan

Python | FastAPI | SQL | MySQL | Docker | Elastic Stack

Oct. 2022 - Mar. 2023

- Deployed a logging system with Elastic stack to streamline log analysis across multiple servers, cutting manual effort by 95%
- Refactored the backend codebase with Object Relational Mapping (ORM), reducing the use of raw SQL queries by 70%
- Collaborated with a team of 6 to develop a Business Intelligence platform, benefiting over 100 users across the organization

Kapito, Software Engineer Intern

Hsinchu, Taiwan

Python | FastAPI | PostgreSQL | Docker | Kubernetes | Drone CI | Ansible

Jul. 2022 - Aug. 2022

- Reduced 50% of API endpoints in the backend by applying role-based access control in the current system
- Constructed automated CI/CD pipelines using Ansible and Drone CI, speeding up application setup 3x times faster
- Established a Kubernetes cluster to orchestrate the deployment and management of NVIDIA Triton Inference Server

Agentic Intelligence for Mobile Engagement and EXperience Lab, Research Assistant

Hsinchu, Taiwan

National Yang Ming Chiao Tung University

Jul. 2021 - Sep. 2023

- Conducted research in Human-Computer Interaction (HCI) with a focus on mobile systems and mobile notification
- Led a team of 3 people in developing intelligent notification agents and published 5 papers on mobile notification management

Projects

Apache Airflow (open source)

Python

- Contributed to the Airflow providers, improving the reliability and performance of Airflow's integrations with external systems
- Developed and refined unit tests for provider modules, ensuring code quality and enhancing integration stability

NotiSummary

Kotlin | Android SDK | Android Jetpack | Jetpack Compose | Material Design 3 | Room | Firebase

- Achieved increased user engagement with 500+ downloads on the Google Play Store within a few months after release
- Crafted an AI-powered application that utilizes large language models to present smartphone notifications in a summary form

Skills

Languages

Python, C, C++, Java, Go, JavaScript, TypeScript, HTML, CSS, Shell Script, SQL

Frameworks

FastAPI, Flask, Node.js, React.js, Next.js, GraphQL, gRPC

DevOps

Docker, Kubernetes, Jenkins, Ansible, Elastic Stack (ELK), Google Cloud Platform, Amazon Web Services

Databases

MySQL, PostgreSQL, SQLite, MongoDB, Firebase, Redis, Apache Iceberg