Peng-Jui (James) Wang

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Education

University of California, San Diego   *La Jolla, CA*
Master of Science in Computer Science   *Sep. 2024 - Jun. 2026*
- GPA: **3.9/4.0**
- Relevant Coursework: Database Systems, Machine Learning, Natural Language Processing, Recommender Systems

National Yang Ming Chiao Tung University (National 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

Skills

Programming Languages	Python, C, C++, Java, Kotlin, JavaScript, TypeScript, HTML, CSS, Shell Script, SQL
Frameworks	FastAPI, Flask, Spring Boot, Node.js, Express.js, React.js, Next.js, GraphQL
DevOps	Docker, Kubernetes, Jenkins, Drone CI, GitHub Action, Ansible
Tools & Services	Linux/Unix, Git, Nginx, Elastic Stack (ELK), Google Cloud Platform, Amazon Web Services
Databases	MySQL, PostgreSQL, MongoDB, Firebase, Redis

Work Experience

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
- Optimized frontend performance by utilizing virtualized rendering for large-scale tabular data, decreasing load times by 50%
- 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%

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

Mobile and Ubiquitous Interaction 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
- Published 4 papers on mobile notification management, aimed at optimizing mobile interactions and minimizing disruptions
- Led a team of 3 people in developing intelligent notification systems to enhance smartphone users' notification experience

Projects

NotiSummary
Kotlin | Android SDK | Android Jetpack | Jetpack Compose | Material Design 3 | Room | Firebase
- Achieved increased user engagement with 300+ 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

LinkLite
TypeScript | Node.js | Express.js | MongoDB | Redis | Docker | Nginx | Github Action | Jest
- Developed RESTful APIs that offer URL shortening services, integrated with CI/CD pipelines for automated testing and deployment
- Implemented a caching mechanism using Redis to expedite URL lookups and reduce database overhead

Parallel File Finder
C | pthreads
- Developed a simple and fast alternative to GNU *find*, enabling file searches based on specified criteria in a directory hierarchy
- Boosted search speed by 200% through parallel directory traversal and pattern matching with thread-safe queues