Peng-Jui Wang

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Education

National Yang Ming Chiao Tung University (National Chiao Tung University) *Hsinchu, Taiwan*
Bachelor of Science in Computer Science *Sept. 2019 - June. 2023*
- GPA: Overall **4.1/4.3**, Major **4.16/4.3**
- Academic Achievement Award (Top 5% of the class)

Work Experience

Appier Inc. *Taipei, Taiwan*
Software Engineer Intern *July. 2023 - Present*
- Built a Pub/Sub-based notification service handling 1000+ messages daily, with email integration and customizable formatting
- Boosted system observability via integration of Elastic APM and OpenTelemetry for end-to-end performance monitoring
- Employed multiple design patterns to migrate the existing monolithic system into 3 scalable, modular microservices

Shopee Pte. Ltd. *Taipei, Taiwan*
Backend Engineer Intern *Oct. 2022 - Mar. 2023*
- Implemented a logging system using Elastic stack, achieving a 95% decrease in manual log analysis efforts
- Refactored the backend codebase with Object Relational Mapping (ORM), reducing the use of raw SQL queries by 70%
- Designed and managed 3 new databases to support the ongoing projects and enable smooth project delivery

Kapito Inc. *Hsinchu, Taiwan*
Software Engineer Intern *July. 2022 - Aug. 2022*
- Applied role-based access control to the current system, reducing 50% of API endpoints in the backend
- 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

Research Experience

Mobile and Ubiquitous Interaction Lab *Hsinchu, Taiwan*
Research Assistant *July. 2021 - Sept. 2023*
- Worked on Human-Computer Interaction, especially focusing on mobile attention and notification
- Conducted 2 studies on AI-enhanced notification management to optimize mobile interactions and minimize disruptions
- Developed intelligent notification systems that improve smartphone users' experience of notifications

Publications

Uei-Dar Chen, **Peng-Jui Wang**, Yi-Chi Lee, Yu-Ling Chou, and Yung-Ju Chang. 2024. From Overwhelmed to Overview: Understanding Users' Practices, Experiences, and Challenges with an App Offering ChatGPT-Powered Mobile Notification Summaries. *UbiComp/ISWC '24. (submitted)*

Yong-Han Lin, Li-Ting Su, Uei-Dar Chen, Yi-Chi Lee, **Peng-Jui Wang**, and Yung-Ju Chang. 2024. Pinning, Sorting, Categorizing Notifications: A Mixed-methods Study of Usage and Experience with Mobile Notification Management Features. *UbiComp/ISWC '24. (submitted)*

Peng-Jui Wang, Yi-Chi Lee, Uei-Dar Chen, and Yung-Ju Chang. 2023. NotiSummary: Exploring the Potential of AI-Driven Text Summarization on Smartphone Notification Management. *UbiComp/ISWC '23.*

Yong-Han Lin, Li-Ting Su, Uei-Dar Chen, **Peng-Jui Wang**, Yi-Chi Lee, and Yung-Ju Chang. 2023. Automatic, Manual, or Hybrid? A Preliminary Investigation of Users' Perception of Features for Supporting Notification Management. *UbiComp/ISWC '23.*

Fang-Ching Tseng, Zih-Yun Chiou, Ho-Hsuan Chuang, Li-Ting Su, Yong-Han Lin, Yu-Rou Lin, Yi-Chi Lee, **Peng-Jui Wang**, Uei-Dar Chen, and Yung-Ju Chang. 2023. Multiple Device Users' Actual and Ideal Cross-Device Usage for Multi-Stage Notification-Interactions: An ESM Study Addressing the Usage Gap and Impacts of Device Context. *CHI '23.*

Projects

NotiSummary
Android | Kotlin | Jetpack Compose | Material Design 3 | Room Database | Firebase
- Crafted an AI-powered application that utilizes large language models to present smartphone notifications in a summary form
- Achieved user engagement with 150+ downloads on the Google Play Store within the first month of release

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

Skills

Languages & Frameworks	C, C++, Python, JavaScript, TypeScript, Kotlin, FastAPI, Node.js, React.js
DevOps & Databases	Git, CI/CD, Docker, Kubernetes, Elastic Stack, GCP, AWS, PostgreSQL, MongoDB, Firebase, Redis