

Yukai Shan



<https://pinapelz.com>

EXPERIENCE

Panasonic Avionics

Software Engineering Consultant (Capstone Project) Jan 2026 - Present

- Designed a two-tier rollback architecture for in-flight advertising deployments, enabling safe version reversion and fault recovery
- Built a proof-of-concept pipeline and dashboard for campaign validation, deployment, and version-controlled rollout management
- Developed dashboard for connectivity-based configuration updates, replacing infrequent monthly ad loads with on-demand settings adjustments

EDUCATION

University of California, Irvine

Bachelor of Science in Software Engineering - 3.87 GPA June 2026

- Dean's Honor List Award (**All Quarters**)
- Contributed to Open-Source Information and Computer Science Student Council Led Projects
- **Academic Lab Tutor** for Intermediate Python Programming (Spring 2023), tutoring 250+ students
- **Coursework:** Data Structures & Algorithms, Internet Applications Engineering, Relational Databases, Project in Operating Systems, Software Testing and Quality Assurance

PROJECTS

Auto-LiveTL – Real-Time Subtitle Translation Engine with LLM Post-Processing Spring 2026

- Built a local real-time subtitle translation backend using faster-whisper for live speech translation of PCM audio streams (ASR), delivering subtitles via server-sent events.
- Integrated local **LLM cleanup** to de-duplicate transcriptions and improve subtitle quality with context-aware post-processing.
- Added **silence detection, hallucination filtering** and audio resampling; to improve inference speed, stability, and accuracy.

573-Updates – AI Powered News Aggregator for Arcade Games Spring 2025

- Built a modular **Python scraping system** to collect, standardize, and unify data from multiple news sources.
- Created a **modern React Typescript** + Tailwind CSS single-page application with filtering, search, and responsive views capable of scaling to millions of users.
- Implemented **PWA** capabilities, including offline access and push-style notifications using service workers.
- Utilizes **AI/LLM** integrations to provide translation for infographics as well as summaries at scale

JHolodex - Java Wrapper for the Holodex REST API Spring 2023

- Developed a **complete Java wrapper** supporting all Holodex GET/POST endpoints (retrieving channels, events, livestreams, and metadata)
- Automated **CI/CD** for deployment to Maven Central, simplifying installation and integration for developers.
- Added request builders, type-safe structures, and in-depth documentation to streamline usage.

SKILLS

- Languages: Python, C++, JavaScript/TypeScript, Java, C#
- Tools: React, Redis, MySQL, Postgres, Git, Linux, AWS