

Andrew Lee

Taiwan

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Experience

MOXA Inc.

New Taipei City, Taiwan

IT APPLICATION ENGINEER

Jun 2024 - Now

- Standardized frontend development across the IT department by authoring a comprehensive guide covering both technical patterns and UI/UX implementation strategies.
- Created and maintained an internal Vuetify-based component library, designed to enforce consistency and accelerate frontend development, now used across teams.
- Led the frontend development of an internal BPM system for a neighboring team, improving cross-team code quality and maintainability.
- Developed the frontend of the latest generation of "Partner Zone" - feature-rich platform used by global distributors and partners.
- Improved UX across platforms and led creation of a Figma UI system aligned with MOXA branding, enabling smoother collaboration between analysts, designers and engineers.

Athena Information Systems

Taipei City, Taiwan

SENIOR SOFTWARE ENGINEER

Oct 2023 - Mar 2024

- Led the migration from Vue 2 to Vue 3, replacing Vuex with Pinia and modernizing legacy codebases.
- Maintained a TypeScript-based UI library using SyncFusion components.
- Redesigned ERP portal UI for flexibility and clarity, working closely with UX designers.

PhaseTech & Advanced Computation Laboratory

New Taipei City, Taiwan

TECHNICAL LEAD / FOUNDING ENGINEER

Jan 2019 - Jul 2023

- Led and developed MarineCom(Patented TW202437745A), enabling affordable satellite communication for marine usage.
- Rebuilt the architecture for DeepSea9v4, reducing memory use by 75% and boosting render speed by 90% faster than the previous generation.
- Improved catch-reporting UX in fixed-net fishing by 70% through streamlined UI/UX design and data structure improvements.
- Assessed drone deployment for geo-survey, reducing ops cost by 50% while ensuring data privacy.

Projects

Customized Aerial Screen Saver

<https://github.com/FalconLee1011/Customized-Aerial-Screen-Saver>

MAINTAINER

2023 - Now

- Developed a Swift/SwiftUI macOS app enabling users to customize Apple's Aerial screensaver by injecting videos and modifying protected system asset configurations.
- Reached 215+ GitHub stars, 7 forks, and still growing (latest release: v1.2.0, Jun 2025).
- Featured in the MacRumors community: [link](#)
- Tech stack: Swift, macOS frameworks, filesystem APIs, JSON, GitHub versioning.

COVID-19 CIC

<https://covid-cic.xtl.tw>

MAINTAINER

2021 - 2024

- Collecting historical global COVID-19 data with hourly time resolution.
- Implemented geographic visualization, historical data charts, and real-time case information overview dashboard.
- Tech stack: JavaScript(Vue), Chart.js, CSS3, Python(Flask), MongoDB

MarineCom (Patented TW202437745A)

LEAD DEVELOPER

2021 - 2023

- Designed a low-cost satellite communication platform for offshore vessels with real-time chat and SOS features.
- Built cross-platform mobile apps using Vue, TypeScript, and Ionic to support satellite chat and emergency alerts.
- Integrated Garmin SDK, hardware, Androidx86, and Arduino to create a WiFi access point for mobile devices, enabling stable bidirectional satellite messaging.

Skills

Frontend

Vue, Nuxt, Electron, CSS3, Webpack, Ionic Framework, Laravel, SwiftUI, jQuery

Designing

Figma, Photoshop Adobe XD

Data Visualization

CesiumJS, MapBoxJS, Chart.js, D3.js, three.js

Backend

Flask, MongoDB

DevOps

Git, GitlabCI, Nginx, Docker, AWS, Octopus Deploy

Embedded System

Arduino, Raspberry Pi

Programming Languages

TypeScript, JavaScript, Python, Swift, PHP, C++