

Yu-Chung 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.
- Built and maintain an internal UI component library based on Vuetify, designed to enforce consistency and accelerate frontend development across teams.
- Led the frontend development of an internal BPM system for a neighboring team, improving cross-team code quality and maintainability.
- Develop the frontend of the latest generation of "Partner Zone" - a all-in-one solution for sales, ordering etc... platform for MOXA's partner and distributors.
- Enhancing the experience of both desktop and mobile users for a better, more friendly, intuition-based, and clean style by assisting the UI/UX design and communicating with business analysts and users.
- Created and maintain Figma UI library from the ground up, aligned with MOXA's Global Marketing guidelines, enabling a seamless workflow between designers, analysts, and end users.

Athena Information Systems

Taipei City, Taiwan

SENIOR SOFTWARE ENGINEER

Oct 2023 - Mar 2024

- Leading the transition of products from Vue 2, including frameworks like Nuxt 2 and Vuex, to Vue 3 with Nuxt 3 and Pinia.
- Maintenance internal UI library based on SyncFusion using TypeScript.
- Worked closely with UI/UX designers to redesign an all new ERP portal page, providing fully-customizable, friendly, modern UI and UX.

PhaseTech & Advanced Computation Laboratory

New Taipei City, Taiwan

CHIEF TECHNOLOGY OFFICER, SOFTWARE ENGINEER

Jan 2019 - Jul 2023

- Led and developed MarineCom(Patented TW202437745A), a budget satellite communication solution costs 25 of the current market average.
- Conducted assessment of drone's geographical usage, resulting in over 50% cost savings while ensuring data privacy.
- Designed and developed DeepSea9v4, with the redesigned system architecture, the realtime global vessel monitoring system is 90% faster and the memory usage is 75% less than the previous generation.
- Enhanced catch reporting flow in the fixed-net fishing industry by 70% through an improved UI/UX design and optimized data structure and algorithms.

Projects

MarineCom (Patented TW202437745A)

<https://marinecom.phasetech.tw>

LEAD DEVELOPER, SYSTEM ARCHITECT

2020 - 2023

- A budget-friendly, cross-platform, realtime chat via satellite (powered by Garmin) solution for maritime industry.
- Created a multiplexer service in Kotlin on Android-x86, running on our communication server, to manage bi-directional data exchange, with a custom secure protocol based on TCP and HTTP for stable, efficient communication between mobile devices and satellite hardware.
- Utilized Vue + Ionic Framework app with full multiplatform support and real-time messaging.
- Integrated Garmin SDK for satellite communication and SOS alert functions.
- Deployed Arduino-based GPS modules to provide accurate positioning and redundancy for SOS tracking.
- Tech stack: Kotlin, Android-x86, Garmin SDK, Vue, Ionic, TCP/HTTP, Arduino, Flask, Docker, CesiumJS.

COVID-19 CIC

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

DEVELOPER

2021 - 2024

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

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

Embedded System

Arduino, Raspberry Pi

Programming Languages

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