Alex Lu

Senior Software Engineer

👤 Profile

Alex Lu is a highly skilled senior engineer with over 9 years of professional experience in developing web and decentralized applications. He has in-depth knowledge of software development principles, design patterns, and best practices and excels at bridging the gap between design and engineering, enabling teams to establish a design language that results in high-quality user experiences.

Alex prioritizes communication and trust when working with distributed teams, recognizing that effective collaboration is key to achieving project goals. Furthermore, he is a competitive and collaborative programmer who actively participates in online challenges and constantly seeks to expand his knowledge and expertise to enhance his craft.

Alex's commitment to continuous learning and professional growth makes him an asset to any team.

💼 Employment History

Senior Full stack engineer at Togggle LTD, London

September 2022 — April 2023

Led development of a KYC SaaS solutions using Nest.js, React.js, Redux, typescript, MUI and styled-component and working with distributed teams ,remote collaboration and agile methodologies

- Built and maintained 100% standard-based reusable React components and determined design system.
- Established coding standards by code review and consistent feedback, identified bottle-neck issues, and proposed solution resulting in 30% of development speed and 15% of performance increasement
- Contributed to building the graphQL API for the B2B app using nest.js and mongoDB
- Set up codebases for frontend and backend based on containerization using Docker and implemented serverless architecture on AWS services, implemented fully automated CI/CD with Gitlab and AWS, resulting in 50% reduction of hosting time and cost
- Crafted standalone golang backend server for managing KYC data and introduced secure distributed storage using Storj, guaranteed 200% security and safety for personal data

Skills: React.js, Redux, typescript, MUI, React-query, Apollo GraphQL, Nest.js, TypeORM, MongoDB, PostSQL, GoLang, Storej, AWS Apprunner, Docker, , React-testing-library, Jest, Mocha, Cypress

Full stack and blockchain developer at Louverture Finance, London

November 2021 — September 2022

Details

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Links

https://linkedin.com/in/alex-lu-59592b270
https://github.com/alexlu0917

Skills

React

Web3

Next.js

Typescript

JavaScript

Docker

Node.js

Python

MongoDB

HTML

CSS

SCSS

SASS

LESS

tailwind CSS

MUI

Jest

Cypress

Vue.js

AngularJS

Git

Led the full-stack original applications generation and design concept and architectural definitions phases and systems development and deployment, including existing systems integration, upgrades, enhancements, and migrations.

- Built NFT compounding platform equipped with built-in staking and compounding, and introduced gamification solution for increasing interest, increased user engagement up to 190%
- Created the own NFT marketplace that have distinct architectures based on Next.js and Typescript, resulting in good modularization and 25% of development speed increases.
- Crafted 100% standard-based reusable react components and improved performance and SEO using automatic code splitting, lazy image loading, prefetching, SSG, SSR, CDN and dynamic routing
- Planned and worked in sprints where tasks were always a combination of tight roadmap features and the team's own input

Skills: React.js, Next.js, Tailwind CSS, Moralis API, Web3.js, Solidity, Smart contract, Avalanche

Senior Full stack developer at HunnyDAO, San Francisco
May 2021 — November 2021

Designed and implemented Hunny DAO protocol and contributed to 3 blockchain games,

proposed ideas for making more revenue

- Design and re-architecting HunnyDAO platform from Olympus DAO and introduced more suitable data models for the treasury of DAO, so saved more than $250,000 gas fee for tokenization and ICO
- Established the first-class high-revenue DAO by introducing a time-weighted staking system called the hyper-staking feature, whose average APR is more than 17%.
- Proposed the ideas for a user-friendly DApp and integrated Paraswap SDK, resulting in a 150% user engagement period
- Recommended a UI architecture suitable for DAapp, based on ECMAScript 6 and Typescript, with 100% standards-based Web Components and contributed to well-tested web3 integration.

Skills: React.js, Typescript, MUI, styled-component, Express.js, PostSQL, Solidity, Smart contract, Binance smart chain

Senior Frontend developer at Sacred Finance, San Francisco
May 2020 — May 2021

Designed, built, and deployed a mobile-first responsive private Defi platform using React.js, MUI, and Web3.js

- Collaborated with a team of 3 front-end engineers to implement simple and easy-to-use front-end web interfaces using React.js from Figma designs. (100% pixel-perfect)
- Worked closely with UI designers to ensure the user interface is consistent, usable, and accessible

Solidity

Smart contract

Go

Rust

AWS

GCP

Firebase

Hobbies
Reading
Football
Video game

Languages
English

Cantonese

- Created 6 custom pixel-perfect reusable components to interact with smart contracts using web3.js
- Planned and performed Quality Assurance keeping test coverage of frontend codebase more than 75%
- Started with React version 17 and MUI 4, updated them to React version 18 and MUI 5

Skills: React.js, Web3.js, Javascript, Material UI 4, MUI 5, styled-component, Solidity, Smart contract, Kovan, React-testing-library, Jest, Mocha, Cypress

Blockchain specialist at Enuma Technologies, Hong Kong
May 2019 — May 2020

- Implemented Layer2 solution using merkle tree.
- Worked on building an Exchange prototype with OAX foundation.
- Built DApps, software consisting of front-end with TDD, integration/end-to-end testing and continuous integration
- Built off-chain nodes using microservices and nest.js

Full stack developer at Information Worker Services Hong Kong Limited, Hong Kong
August 2014 — May 2019

Began software developer career, experienced full-stack web development, and contributed to over 12 projects including e-commerce, healthcare, admin-portal, fintech, and so on

- Participated in e-commerce SaaS project using vue-storefront, express.js, and Magento CMS
- Migrated Laravel-based web app to Django-based app and re-architectured database structure, reduced loading time from minutes to less than 10 seconds
- Optimizing web pages for maximum speed and scalability by introducing reusable code, code splitting, and reducing unnecessary re-renders
- Solved technical problems in the existing code to improve the performance of a heavy Angular.js front end by talking to Node.js and Express.js via REST API.
- Revamping UI/UX and overall design aesthetic of the high-volume single-page app, resulting in a 53% increase in user retention.
- Fully automated infrastructure and cloud provisioning related to the critical web application resulting in 4x cost reduction spent on hosting

Skills: PHP, Laravel, jQuery, MySQL, Django, express.js, Magento, Angular.js, Vue.js, Docker, Git, AWS, GCP, Kubernetes

❧ Education

Bachelor's Degree, City University of Hong Kong, Hong Kong
April 2009 — November 2013