Kay Macklin

FULL STACK ENGINEER

I'm experienced across the whole stack and my main areas of expertise are cloud backends on AWS and Digital Ocean, and frontend work with React and Three.js. I love building quality software to a high technical standard, and I understand the importance of building good human connections with my team to achieve this.

Employment History

Software Engineer, Singapore-MIT Alliance for Research & Technology

APRIL 2024 — PRESENT

- Full-stack development of geospatial web application with both serverless cloud-native data types and traditional WMS services.
- Automate collection and processing of geospatial data from NASA.
- Configure AWS infrastructure for S3, EC2, SES and implement IAM policies.

Head Software Engineer, NACT Engineering

DECEMBER 2022 — APRIL 2024

- MERN-stack development and design of low-latency, real-time drone control web app with high-availability internationally.
- Programmed authentication protocols, and session management to securely deliver data to clients.
- Implemented staging environment with automated testing that increased code coverage and reduced production vulnerability.
- Orchestrated the transition to continuous testing within a CI/CD pipeline including integration and E2E tests that reduced time-to-deployment by 70% with zero-downtime.
- Created architecture to minimize dependencies between components; prioritizing flexibility and scalability per startup needs.

Nanochip Production Lead, Silver Factory Technology

MARCH 2021 — MAY 2022

- Managed and coordinated 5 cross-functional operations teams of 25 people leading to increased production throughput by 300% in 7 months.
- Developed and maintained in-house inventory management system for traceability and product tracking. And developed automated dashboard for production yield analysis and report generation.
- Led the continuous development and improvements via issue tracking, root cause analysis, implementation of operationally practical solutions.
- Was a founding member of the startup and obtained ISO13485 certification by writing documentation, risk management, FMEAs, process and software validation reports.

No visa sponsorship required

UK-based with full rights to work. No future sponsorship required.

Contact

ktyntang@gmail.com
+44 7507935438

Links

Portfolio
LinkedIn

Skills

AWS - Digital Ocean

React - Redux - Zustand

Three.js - R3F - WebGL

React Native

Javascript - Typescript

CSS - Tailwind - HTML

Node - Express - Nginx - Python - Flask

Mongo - Redis - PostgreSQL

Docker - Github Hooks/Actions - Firebase - AWS

Playwright - Puppeteer - Jest - Selenium

Education

B.Sc. (Hons) in Biological Sciences with 2nd Major Food Science & Technology (Honours Distinction)

Nanyang Technological University, Singapore (2015 - 2019)