

Kirin Hou

SOFTWARE ENGINEER · DEVOPS ENGINEER

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Software Engineer at Xendit. 5+ years experience in **cloud native** application development, specializing in **containerized** backend development, infrastructure as code and continuous integration.

Work Experience

Xendit

Taipei, Taiwan (Remote)

SENIOR SOFTWARE ENGINEER | TypeScript · PostgreSQL · Redis · Terraform · Kubernetes · AWS

Aug. 2021 — Current

- Developed a financial backend service in a 10+ engineers agile team using high-collab. approaches like **remote pair programming**
- Migrated & deployed a distributed system to be production ready on AWS EKS with minimal downtime of **4 minutes**
- Proposed **solution architectures**, provisioned infra. & CI/CD pipelines for 8+ services on **10+** different AWS services managed by Terraform
- Served as team lead administrator of AWS; **conducted investigations** & resolved 4+ production incidents for multiple teams

Trend Micro

Taipei, Taiwan

SENIOR ENGINEER | TypeScript · Python · GraphQL · Kubernetes · AWS

Sep. 2019 — Jul. 2021

- Integrated internal intelligence API services using **GraphQL** and **Kubernetes** for ~400 engineers and threat researchers in threat hunting
- Moved an on-premise system to AWS. Built containerized scalable deployment with AWS Fargate & CDK which reduced ~20% of cost
- Served as team lead administrator of **Kubernetes** on AWS; operated 3 clusters & 10+ production workloads
- Introduced IaC tool **AWS CDK** to our team; provisioned 4 system infrastructures that consist of 6+ different AWS services like AWS Glue, Step Functions & RDS
- Optimized CI/CD pipelines for 6+ projects using prebuilt images, caching & parallelism; adopted conventional commits & semantic versioning that reduced up to **75%** of deployment time

Ugotit Design Inc.

Taipei, Taiwan

FULLSTACK ENGINEER | Node.js · MongoDB · GCP

Feb. 2019 — Aug. 2019

- Designed & implemented scalable systems with Google App Engine & Cloud Scheduler that served **250+** concurrent users and above **500 QPS**
- Served as tech lead & system architect of 4 web-based game projects that generated revenue of over **1 million** for the company in 7 months
- Focused on backend development with **Node.js** & **MongoDB**; cooperated with frontend engineers to design state management with React Redux; set up frontend build system with Webpack, Babel & Gulp
- Adopted agile development with unit testing & integration testing using ESLint, Mocha & Travis CI with **83%** of code coverage

Education

National Chiao Tung University

Hsinchu, Taiwan

B.S. IN COMPUTER SCIENCE | Program of Network and Multimedia Engineering

Sep. 2014 — Jun. 2018

Skills

Programming	Node.js (TypeScript), Python, Shell Script	Frameworks	Apollo GraphQL, Koa, NestJS, Jest
Infrastructure	AWS, GCP, Linux, Kubernetes , Docker	Working Env.	Linux, VS Code, Neovim, Git, GitHub
DevOps Tooling	AWS CDK, Terraform, CircleCI, GitHub Actions, Helm	Languages	TOEIC 905

Selected Projects & Open Source Contribution

Wireless Multicast Video Streaming Recovery System

- Built a proxy server with C++ that recover lost packets from FFmpeg **Pro-MPEG FEC** video stream in real-time which achieved packet loss rate from 10% down to less than **3%**

EEG Desktop Application

- Developed a real-time high-resolution (250Hz, 24bit) electroencephalography (EEG) desktop app that supported 6 types of plot using **Web-Socket**, PyQt, & Matplotlib

AWS CDK

- Developed features including adding option to specify bundling docker entrypoint & option to auto delete images upon ECR repository removal using CloudFormation custom resource with **Lambda** function; fixed props validation for EC2 volume & ECR repository constructs; migrated tests from nodeunit to **Jest**

Open Source Communities

- Devoted to cdnjs camp in NCTU; added / updated 15+ packages in cdnjs; dedicated in Taiwan CDK Meetup community; exchanged directly with AWS developer advocate; attended DevOps Taiwan Meetups & every COSCUP since 2017