Joel Hyeokjoo Mun

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An engineer with 4 years of development experience, full of curiosity and genuine love in software engineering

EDUCATION

The University of Hong Kong (leave of absence: 2017 – 2021)   Sep 2015 – June 2023
Information Systems & Computer Science

EXPERIENCE

Senior software engineer | Presence Labs, Inc, **Remote (US)**   Nov 2020 – Sep 2021
- Took the lead in rewriting the PHP-based chat app with React, Redux and Typescript, achieving 25% decrease in Electron's average CPU usage
- Designed and deployed Node.js endpoints based on ECS and Lambda using IaC tools, serving thousands of users for real-time communication via voice chat and screen share
- Reduced the size of the desktop app by 30% by organizing the project into efficient monorepo structure
- Fully automated testing, deployment, build of the Electron and web app on CI/CD

Frontend team lead | Angelswing, Inc, **South Korea**   Sept 2019 – Nov 2020
- Managed the team of six frontend engineers and communication with business and design team
- Directed the team in upgrading the product version to 2.0 with improvements in UI and technology
- Set up E2E testing using Puppeteer in CI/CD for the vital features of the web app
- Implemented performant 2D/3D Graphics visualization using Canvas and WebGL. Boosted the frontend performance up to 20% by identifying bottlenecks in React and Redux

Software Engineer | Republic of Korea Navy, South Korea   Oct 2017 – Aug 2019
- Developed internal Chrome extension for cybersecurity management inside the intranet
- Automated monitoring virus infection by creating a bash application detecting anomaly in data from PostgreSQL
- Maintained scraper and frontend for an internal search engine based on JavaScript

Software Engineer Intern | Gravitons, Hong Kong   Mar 2017 – May 2017
- Prototyped and developed the UI of the web community app using Framer.js and JavaScript

Projects

Graph
- Designed a performant graph data visualization library based on TypeScript, WebGL and IndexedDB

Project 'Hack the Web'
- Reported security vulnerabilities to notable organizations (GitHub, Riot Games, AT&T, Slack, Canva and more), for better understanding of cybersecurity and received total ~20K USD in return

YouTube Lite
- Built a simpler version of YouTube with React and Typescript, reaching 500+ monthly users

Elasticpwn
- Leveraged Go and React to collect and analyze data from thousands of Elasticsearch endpoints

Technologies and Languages

- JavaScript, TypeScript, Python, Go, AssemblyScript
- AWS, AWS CDK, Terraform, Docker, Electron, React, Redux, Node, MongoDB, CircleCI, WASM

Awards

- ROK Military Open-Source Software Competition, runner-up, Nov 2018
- ROK & US Navy Cyber Defense Contest, first prize, May 2018
- HKU Foundation Scholarship for Outstanding International Students, Nov 2015