JOEL HYEOKJOO MUN: FULLSTACK WITH SUPERPOWER IN FE/SECURITY

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Education

Yonsei University, South Korea

Exchange program / 2022

The University of Hong Kong

Information Systems and Computer Science / 2015 - 2017 (military service: 2017 - 2019)

Experience

Security researcher (hackerone, bugcrowd, naver/whale bug bounty, nokia, ...)

Sep 2021 – Jan 2022

- Reported security vulnerabilities and received bounties from the companies/products not limited to: AT&T, Slack, Github, Naver, Whale Browser, Riot Games, Canva, Nokia, Logitech, Basecamp.
 Some other companies are unable to be disclosed of names.
- Used tech: Bash, Docker, Python, Kali linux, Golang, Javascript, hacking analysis tools

Presence Labs, Inc (presence.so)

Lead software engineer, Fullstack / Nov 2020 – Sep 2021

- Built and led the team of four, mentored engineers and the designer, and helped them be sensitive to and knowledgeable of the problems of users
- Achieved 50% increase in performance by undergoing a complete rewrite of frontend from PHP-based web app to a very strictly typed Typescript React app.
- Automated CI/CD from 0% to 100% for testing, web deployment, Electron build, code signing and deployment for all OS's, on CircleCI and Github Actions.
- Created and deployed API endpoints with Node.js for WebRTC connection with IaC tools on AWS
- Used tech: CI/CD (CircleCI and Github Actions), Amplify, S3, ECS(Fargate) and ECR(Docker),
 Route53, Elastic Transcoder, Lambda (SAM CLI) & API Gateway, Redis, CDK, Terraform, Github
 Registry, Node.js, ws, Typescript, Storybook, React, styled-components, styled-system, Redux, Reduxsaga, custom Redux middlewares, typesafe-actions, reselect, redux-persist, Electron, Webpack,
 Jest, Enzyme, socket.io, Lerna, and anything else that the team needed.

Angelswing, Inc (angelswing.io)

Frontend team lead / Jan 2020 - Nov 2020

- Built the team of six up from scratch, managed communications and logistics e.g. Introduced programming conventions.
- Worked closely with the business team to derive insights and problems from the users and build the product they desire
- Boosted web performance by 10% with Chrome performance tool and optimization in React
- Reduced deployment time by 30% by improving CI/CD
- Successfully launched the new version of product at 2.0 with enitrely new UI/UX based on React & TS
- Maintained forks of open-source repositories for custom purposes

Frontend engineer / Sep 2019 – Jan 2020

- Worked on UI components and logics
- Set up E2E Testing for CI from scratch, increased automated testing coverage from 0% to 10%
- Used tech: React, Typescript, Jest, Puppeteer, Docker, CircleCl, Openlayers, Three.js, Cesium.js, RxJS, Redux, Storybook, Webpack, Redux-observable, Python, Node.js

CERT, Republic of Korea Navy (navy.mil.kr)

Software engineer / Oct 2017 – Aug 2019

- Achieved 0% to 100% automation on repetitive processes such as virus log querying, email blocklisting, device control system monitoring by creating web and shell applications
- Monitored, tracked, and prevented harmful network traffics and activities using firewall and packet sniffing tools (Other operations are classified)
- Worked closely with and surveyed officers to find problems in the current working process
- Used tech: bash, Javascript, Ubuntu, network analysis tools

Gööp, Inc (hk.goop.ai/feed)

Web developer / Apr 2017 - May 2017

- Developed the landing webpage that suits the goal and value of the business
- Designed the logo and the webpage prototype

Projects

- Youtube Lite: Simpler version of YouTube with supreme React and Redux skills
- <u>elasticpwn</u>: full-stack security research project on Elasticsearch based on Go and Next.js
- <u>as-pect</u>: blazing fast testing with Assemblyscript; 3rd biggest contributor of all time.
- <u>UI Theory</u>: Creating React in vanilla Javascript to understand its inner workings
- atm: automated scripts for hacking hallmark of Joel's bash skills
- <u>async-jobs</u>: isomorphic, centralized management of async jobs shows all the fun of Typescript Joel knows.
- png-rs: webassembly-first PNG decoder in Rust to be used in Node.is and browser
- @araphcentral/araph: Performant araph visualization with WebGL, Webworkers, and IndexedDB
- @graphcentral/notion: Knowledge graph for Notion, like obsidian.md or Roam research

Curated articles

List of articles demonstrating knowledge in FE as well as other areas. Visit Joel's blog for more articles.

- "Making stupid React smart in re-rendering": Reasons and prevention of re-renders in React
- "How to make useSelector not a disaster": pitfalls & optimization for useSelector in Redux
- "Extensive introduction to why and how you might want to use and test redux-observable": Deep dive into practical redux-observable usage
- "Learn all major functionalities on Chrome's performance tab and practice it with a simple React project": Everything about performance profiling on Javascript and React
- "Complete end-to-end guide for developing dockerized lambda in typescript, terraform and SAM CLI": Fullstack development & deployment guide for Lambda

Awards

- Runner-up at Military Open-Source SW Competition / Nov 2018
- 1st place in the ROK & US Navy Cyber Defense Contest / May 2018
- HKU Foundation Scholarship for Outstanding International Students / May 2015

Certifications: TOEFL: 111; TOEIC: 990;