# Joel Hyeokjoo Mun

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

## **EDUCATION**

The University of Hong Kong (leave of absence: 2017 – 2021)

Sep 2015 – May 2023

Information Systems & Computer Science

### **EXPERIENCE**

# Software Engineer | Presence Labs, Remote (US)

Nov 2020 - Oct 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 serverless endpoints 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
- Automated testing, deployment, build of the Electron and web app on CI/CD

# Software Engineer, Frontend Lead | Angelswing, 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 2D/3D visualization web platform with entirely new UI/UX and technology
- Implemented performant visualization using Canvas and WebGL. Boosted the frontend performance up to 20% by identifying bottlenecks in React and Redux
- Set up unit and E2E testing in CI/CD, preventing bugs in most interactive features of the web app

# Software Engineer | Republic of Korea Navy, South Korea

Oct 2017 – Aug 2019

- Developed an 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

- Created 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. Currently recording 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