## Experience

Sept 19 - Current

# Zachary Zhou Zhiheng Software Developer

avengyy@gmail.com +65 9235 2240

Proficient Software Developer based in Singapore. Self-taught, detail oriented and constantly seeking knowledge through curiosity and experience.

# Cartrack

### Frontend Developer

- Improved performance of telemetry data visualization on Recharts by >20% by optimizing API response data and usage of progressive rendering
- Refactored Map marker renderer to leverage the performance benefits of WebGL via Pixi.js to render large datapoints
- Integrated proprietary vehicle WiFi usage telemetry data visualisation

# Technical Skills

#### **Frontend:**

React, Sass, jQuery, Next.js, Bootstrap, Tailwind, D3.js, GSAP, Three.js

#### **Backend:**

Node, Express, PHP

#### **Programming Languages:**

Javascript/Typescript, PHP, Java, Swift, SQL

#### **Operating Systems:**

- Maintained a complex feature of live video footage streaming from vehicles to app
- Created a custom UI component that visualizes task and events in a Calendar liked timeline format

Tech used: React, Redux, Redux Saga, Typescript, Lodash, styled-components, Recharts, Webpack 4, Babel 7, anime.js, Leaflet.js, PHP 7, Google Maps, Here Maps, HLS

Jun 17 - Aug 19

# Snappp

#### Full Stack Developer

- Built a full fledge entertainment mobile application with lonic 3 which later re-developed using React Native
- Improved API response time by 90% by re-developing the core API from scratch with a well planned data structure

#### macOS, Windows, Ubuntu

### Database:

MySQL, PostgreSQL, MongoDB

### **Cloud:**

AWS EC2, Amazon S3, Firebase, Netlify

## Tools:

Webpack, Yarn, Git, SVN, IntelliJ, XCode, Sketch, Figma

## **Others:**

Object Oriented Programming, Functional Programming, UI/UX Concepts, MVC

- Built a content management and analytics dashboard using React and Redux
- Implemented Redux Thunk for asynchronous data handling
- Implemented dashboard analytics visualization using D3.js
- Configured Nginx and PM2 with basic deployment pipeline on AWS EC2

**Tech used:** React, Redux, Redux Thunk, styled-components, Typescript, ES6, Node, Express, Lodash, Sequelize, D3.js, Webpack 3, Babel 6, React Native, Ionic 3

## Links



https://github.com/avengyy/



https://codepen.io/Avengyy/



https://linkedin.com/in/avengyy

## Projects

Personal Project

### Sick Fits

- Built a simple e-commerce site with modern web technologies
- Used GraphQL for API querying
- Used Prisma to interface with relational database
- Used Next.js for server side rendering

Tech used: Next.js, GraphQL, Prisma, Apollo, styled-components, ES2015, Node, Jest

### Android Social Media App (June 2018)

- Full design and development of Android application
- Implemented features such as post sharing with image upload and post deletion
- Worked with native android components such as Fragments, RecyclerView, Drawer Navigation

#### Tech used: Java, Android SDK, Google Firebase, Gradle

Academic Assignment

### **PHP Travel Booking Site** (June 2018)

- Full design and development of the website
- Deployed to a cPanel web server using FTP client and SSH
- Implemented good practices like password hashing and salting with default PHP functions

Tech used: HTML, Sass, PHP, Javascript, Gulp, MySQL, Apache