# Jay Ng

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# **WORK EXPERIENCE**

## TREERING | Full Stack Software Engineer

Oct. 2019 - Present

- Develop frontend application with Angular and TypeScript, and building backend micro-services using PHP
- Reduced MySQL workload by 13% by implementing query caching on database layer using Redis
- Participated in migrating micro-services to cloud services such as AWS and GCP.
- Implemented photo tagging & recommendation system features with AWS Rekognition & Personalize
- Ability to ad designs and codes from specifications, analyze, evaluate, test and debugging.
- Collaborate closely with team to discuss on application architecture, UI components, and backend integration

# **SKILLS**

Programming Libraries/Frameworks Markup/Templating Data/Databases Cloud Technologies

- Python, Java, JavaScript, TypeScript, PHP, Go
- Django, Spring, React, Angular, Flutter, React Native, D3, Kafka
- HTML, CSS, DTL
- SQL, Redis
- AWS EC2, RDS, S3, ElasticCache, ElasticSearch, SES

PROJECTS (more at ngchwanlii.com)

#### SUPERBFRESH

Python3, Django, DTL, Celery, Nginx, AWS MySQL, S3, Redis, ElasticSearch, SES, Stripe API

- Developed an online grocery marketplace using Django based on B2C model
- Used of Nginx as a reverse proxy, static content server & load balancing
- Reduced server query response time from 150ms to 50ms in average
- Implemented search function with AWS ElasticSearch, mail service with AWS SES
- Integrated AWS Redis for page caching, message broker & in-memory cache to increase performance
- Integrated Stripe API for online payment processing, webhooks for monitoring order transaction status
- Implemented functionalities including user, items, cart & order modules, used Celery for asynchronous tasks

### JOURNEY

Flutter, Dart, Baidu's Speech Recognition SDK

- Developed a cross platform mobile travel app using Flutter
- Implemented UIs for home, search, travel & user page
- Used of image caching, lazy loading technique to reduce initial page load time by 20%
- Provide real time flight tracking, manage travel bookings functions with Flutter's webview
- Implemented voice search function using Baidu's speech recognition SDK

## ADSPIRING

Java, Spring Boot, Spring Cloud, Zuul, Hystrix, Ribbon, OpenFeign, Apache Kafka

- Developed advertising serving and retrieval system
- Building microservices architecture using Spring Cloud Eureka, Zuul, Hystrix, Ribbon and OpenFeign
- Implemented fallback method using Hystrix to stop cascading failure and logging information for debugging
- Developed features for updating data index in real time by monitoring MySQL binary log and using Kafka
- Developed Kafka producer and consumer microservices to help in reducing MySQL server load by 30%

## **EDUCATION**

University of San Francisco, San Francisco, CA

Aug. 2015 - Dec. 2018

**B.S.** in Computer Science

Dean's List: every semester

**Honors:** summa cum laude **GPA**: 3.94/4.0