Edward Yung
System Analyst

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📍 Hong Kong, China

☕ https://gitea.com/1m1ucky

📰 http://1amlucky.hopto.org/

A full stack engineer, with a solid background in domain driven architecture design in Django Python, Nest.js Node.js, Gatsby.js React.js, having years of experience in designing, implementing, maintaining backend and linux servers system, managing data pipelines, writing testable codebase, fostering effective teamwork and communication on system designs and completing the sprint tasks, dedicated to analyse interesting datasets, computer security issues and research security vulnerabilities as side projects.

👔 Experience

System Analyst
March 2022 – May 2022

Infocast Limited · Hong Kong (China)

A leading supplier of financial information technology (FinTech) products and services in Hong Kong.

- **Scope of Works**:
  - Maintain common trading account protocols for mulitple banks.
  - Maintain the Java report systems for some vendors.
- **Technologies**: Maven build system, Java Spring, Hibernate ORM, SVN version controls

🔧 Tools

Backend
Python Django, GraphQL, REST, Cron Task framework, Node.js Nest.js, TypeORM, Mobx.js, Rx.js, Java Spring, K8s, PostgreSQL, Mongodb, Maven, Gradle, Airflow

Frontend
React.js, Jsx, Css, Sass, Theme UI, MDX, Android, styled-components, Gatsby.js, GraphQL, Webpack, Gulp

General
TensorFlow.js, Apache Flink, Pandas, Python, TypeScript, JavaScript, k8s, Docker, Git, TravisCI, Figma, Visual Studio Code, Android studio

📎 Projects

Fast & high loading trading data apache flink computation app

Quant Trading Bot

Log4j Vulnerabilities Scanner

Mobile Phone 3D Scanner App

Machine Learning Experiments

Mobile Phone Image Resizer

Django DDD Lite Course

📖 Certificates

Software Engineer

June 2020 – October 2021

HK01 Media · Hong Kong (China)

A large scale media company consists of many different kinds of platforms, large infrastructure and micro-services serving for 8 million daily users.

- **Scope of Works**:
  - Building a wallet SaaS system to enable all HK companies' merchants to have their own payment system in team of 15 engineers and PMs from HK and mainland China.
    - Design and maintain system scalable API and swagger documentations.
    - Resolve daily technical issues and bugs.
    - Analyze business requirements and translate them into system designs.
    - Split and assign sprint tasks to engineers and monitoring task progress.
    - Maintaining old systems written in raw NodeJs and migrating to the new system written in Nestjs Typescript framework, splitting the old monolithic application into micro-services including OAuth, Authentication service.
    - Designed nodejs auto logger framework:
      - Use cases: Automatically logging application function call including all types of payloads, error with execution time, performance monitoring.
    - Design parallel running architecture of two old and new systems, database and partial features migration to strengthen new code base architecture while keeping old features in production to keep system stability.
  - Self study and researched data team technologies:
    - Automatic machine learning pipelines and architectures like GAN, Embeddings, CNN, Maxpool2d, Auto-encoder, Transfer learning, Xgboost, K-means, SGD, SVM, SVD, PCA, etc
    - Machine learning production models and data training system. User behavior and traffic tracking statistics dashboard:
    - Tracking page visits statistics to analyze psychology of the users to let product owner enhance product like payment system usage.
    - Behavior prediction system: predict user genders to recommend them different kinds of content to increase users' staying time.
    - Automatic machine learning training and model hyper-parameters tuning using Kubeflow to increase model accuracy, model training using Tensorflow, workflow automation and monitoring using airflow to enable administrator to find out daily workflow issues
- **Technologies**: Python Django, Nodejs Nestjs, Pandas, TensorFlow, PyTorch, Docker, K8s, KubeFlows, AWS cloud services

Volunteer Technical Consultant, Part Time

August 2019 – January 2020

Viact.ai | HKAI Lab · Hong Kong (China)

A civil construction technologies consultancy.

- **Scope of Works**: AI Video streaming system development, introducing formal SDLC
- **Technologies**: Jetson Nano, Python YOLOv3, React.js, Express.js, Sequelize PostgreSQL, AWS EC2, Cloudfront

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Modernizing Data Lakes and Data Warehouses with Google Cloud
Coursea

Building Batch Data Pipelines on Google Cloud
Coursea

Building Resilient Streaming Analytics Systems on Google Cloud
Coursea

Spring Framework Specialization
Coursea

Spring Data Repositories
Coursea

Spring - Ecosystem and Core
Coursea

Spring MVC, Spring Boot and Rest Controllers
Coursea

Spring - Cloud Overview
Coursea

🎓 Education

Bsc, Applied Mathematics
The Chinese University of Hong Kong
September 2012 – September 2015

HKALE, HKCEE
Fukien Secondary School
January 2006 – January 2012

Updated December 2023

Software Engineer

February 2019 – July 2019

Shopline | Starling Labs Limited | Alibaba Fund · Hong Kong (China)

A large scale online shopping mail consisting of over 500k merchants

- **Scope of Works**: Merchant and customer high loading messaging and broadcasting system development using message queues on cloud
- **Technologies**: React.js, Angular.js, Node.js Express.js, Ruby on Rails, AWS S3, SQS, Cloudwatch, EC2 file buckets, Nginx load balancer, Docker, K8s, Samson CI dashboard for development, staging, production-internal deployments, Semaphore CI, Mongodb, SQL, Redis, Rabbit MQ

Software Engineer, Founder

August 2017 – October 2018

Silvermind Labs · Hong Kong (China)

A digital technology consultancy connects latest technologies and applied mathematics to real world applications like mobile and web, hardware, machine learning and data analytic technologies, helping different kinds of industries to process digital transformation and product innovations

- **Scope of Works**: 3D Scanning Android App Development, Smart wear sensor calibration algorithm development; Airport building information system dashboard development; Frontend web app React framework development; Hold meetings with clients, gathering technical requirements; Engaging in software development at the same time
- **Technologies**: React.js, Node.js, Three.js, Java, Maven, Google Wear SDK, Websocket, WebRTC, Soap
- **References:** [3D Scanning Algorithm Designs] [3D Scanning App Demo]

Programmer

October 2016 – May 2017

AppUnique Limited, Science Park · Hong Kong (China)

An IoT technology company develops home automation platform and provides related IoT hardware and software solutions

- **Scope of Works**: OAuth2 login module and service backend database design and implementation of the platform; Android App development on some bluetooth controlled devices
- **Technologies**: React.js, Express.js, Mongodb, Android Java Framework, Gradle, Bluetooth 4.0 protocols
- **References:** [DB Design Sample] [OAuth2] [App UI]

Research Assistant

August 2015 – August 2016

The Mathematics Department, The Chinese University of Hong Kong · Hong Kong (China)

- **Scope of Works**: worked with several Phds to study journals, literature, hold conferences and develop toolings, machine learning problem in differential geometry and medical imaging problems on brain surface curvatures to Alzheimer diseaseas and image retargeting / resizing problem
- **Technologies**: Java JNI, C++ Eigen matrix library, Matlab
- **References:** [Intro]