Chi Kin (Jason) Law

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EDUCATION

Carnegie Mellon University   **Pittsburgh, PA**

Master of Science in Mobile and IoT Engineering, GPA 4.0 / 4.0   *Aug 2020 – Dec 2021 (expected)*

Relevant coursework: Introduction to Computer Systems

The University of Hong Kong   **Hong Kong**

Bachelor of Economics and Finance, Minor in Computer Science, GPA 3.65 / 4.30, First Class Honours   *Sep 2013 - Jun 2017*

Relevant coursework: Objected-oriented Programming, Data Structures and Algorithms, Principles of Programming Languages, Implementation, Testing and Maintenance of Software Systems, Database Management Systems

WORK EXPERIENCE

Kadensa Capital Limited   **Hong Kong**

Software Engineer / Operations Analyst   *Jun 2017 - Jul 2020*

- Built Research Management System – a hybrid web / desktop app using **Node.js**, **React**, **C++** and **CouchDB**:
    - Created a real-time and point-in-time P&L monitoring dashboard of a 500-security portfolio that aggregates real-time trade fills and market data from Bloomberg API, saved $ 1k / user / month by replacing a 3rd party software.
    - Developed a pre-trade workflow to find the lowest financing and borrowing cost among counterparties, reduced financing cost by 0.2% on average (around $ 400k per annum).
    - Maintained a database of 75,000 securities with the firm's historical P&L and trading data for visualization.
    - Implemented an auto-update mechanism with stable and beta channels linked to GitLab releases.
- Developed web scrapers to scrape market information from stock exchanges and product sales data from Tmall.com using **Python**, empowered the Research Management System with proprietary datasets.
- Created a report generation framework in **Java** where users can write their own reports in HTML, create tables and charts using data from multiple sources. Streamlined generation of more than 40 reports and saved up to 10 man-hours per day.
- Implemented **ETL** pipelines to listen to file changes and load raw data files into **MongoDB** and **SQL Server**, with pluggable **R** scripts for data transformation. More than 500 reports from different parties are processed on a daily basis.
- Employed a **microservice** architecture with a load-balancing API gateway to a cluster of **Docker** services, utilized Docker Swarm and AWS Route 53 to improve site reliability and service availability.
- Utilized **GitLab CI/CD** for automated testing and deployments to enhance **DevOps** workflow.

DBS Bank (Hong Kong) Limited   **Hong Kong**

Part-time Junior Developer   *Sep 2015 - Dec 2016*

- Developed automation programs for internal banking systems in **Java** and smoothened operational workflows for the core banking team. Reduced manual processing time of each customer profile by 90% from 5 minutes to 30 seconds.
- Created a messenger UI for a chatbot using **Angular**, utilized **RabbitMQ** to deliver messages to customer representatives and an automated response engine.
- Built a PDF form converter program in **Java** to detect and convert 100+ text boxes on plain PDFs to programmatically fillable PDFs. Eliminated relationship managers' needs of filling and verifying customer risk profiles manually.
- Gathered user requirement and wrote functional specification documents.

SKILLS

- Languages: JavaScript, TypeScript, Java, Python, C++, C, R
- Frameworks and Libraries: Node.js, React, React Hooks, Redux, Electron, Express, Spring Boot
- Databases and message queues: MongoDB, SQL, CouchDB, RabbitMQ
- Tools: GitLab CI/CD, Docker, Docker Swarm