

# NG Chak Ming (Ivan)

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🌐 [github.com/ivan-ngchakming](https://github.com/ivan-ngchakming)

🌐 [ivan-ngchakming.com](https://ivan-ngchakming.com)

## LANGUAGE & SKILLS

- Proficient at Python, JavaScript, Java, Golang, C++, C, VBA
- Experience in Distributed Backend Development, AWS, GCP, Kafka, Eureka, Kubernetes, Docker
- Experience in Reactive Frontend Development, React.js, Angular, Vue.js, Next.js, Server Side Rendering, Static Site Generation, Gatsby, CMS, Wordpress.
- Database: PostgreSQL, MySQL, OracleDB, MongoDB, DynamoDB, SQLite, Redis
- Tools: Git, CLI, VSCode, Figma, tmux, vim

## OPEN SOURCE CONTRIBUTION

### Likecoin DAO

- <https://github.com/oursky/likedao/commits?author=ivanng-oursky>

### Material UI

- <https://github.com/mui/material-ui/commits?author=ivan-ngchakming>

### Lexical

- <https://github.com/facebook/lexical/commits?author=ivan-ngchakming>

## COURSES

### Cloud Computing

- AWS Lambda, EC2, Relation Database Service (RDS), Elastic Kubernetes Service (EKS), DNS.

### Web Development

- PHP, jQuery, REST, Ajax, React, CSS, JavaScript, TypeScript, HTML5, Node.js, WebSocket, Canvas

### Databases

- Relational Algebra, Query Language, Constraints, Normalisation, Transactions, PostgreSQL, MySQL, SQLite.

### Object Orientated Programming

- Java, Design Patterns, Encapsulation, Abstraction, Inheritance,

## WORK EXPERIENCE

2022-10 -

### Backend Software Engineer

2023-02

Binance (Canada)

- Led in design and development of greenfield project vendor simulator, and integration into multiple existing micro-services. Improved developer experience and efficiency across multiple teams.
- Communicated and cooperated with various stakeholders such as vendors team, know your customer (KYC) team, infrastructure team and front-end team to understand the business requirement and deployment of the project.
- Assisted in re-architected KYC pipeline into micro-services, integrated and maintained new workflow engine into new KYC architecture, improved test coverage and debugged production issues.

2022-06 -

### Software Engineer

2022-09

Oursky Ltd (Hong Kong)

- Integrated and implemented Restful APIs, RPC, WebHooks, and created responsive UIs and front-end logic which connects to these endpoints in existing web service for real estate enterprise customer and admin portal.
- Developed and maintained web3 dApp Decentralized Autonomous Organization (DAO), blockchain indexer, GraphQL API and React.js frontend on blockchain Likecoin in the Cosmos ecosystem.
- Migrated multiple legacy project's CI/CD workflow from GitLab to GitHub self hosted runners, setup sentry monitor, slack error notification and bug fixes.

2021-09 -

### Software Engineer Intern

2022-02

Bowtie Life Insurance Company Limited

- Integrated 3rd party feature flag and A/B testing service, created modal for custom control over and local override of feature flags in dev environment.
- Implemented enhanced new user onboarding flow and registration logic from Figma design and business requirements.
- Set up storybook, unit and integration tests, for front-end web applications.

2021-06 -

### Data Analyst Intern

2021-08

Graphen HK (Hong Kong)

- Designed, implemented, deployed and maintained AI driven news recommendation web application as the sole developer on the project. Integrated ML models to Python Flask backend service. Created and optimised complex SQL queries.
- Set up initial deployment and CI/CD on bare metal linux server for multiple environments, configured PostgreSQL, DNS and Nginx.
- Created web crawlers and ETL flow, setup and trained multiple NLP models for sentiment price impact analysis, and article classification, using ML framework TensorFlow.

2020-06 -

### Actuarial Intern

2021-01

Prudential Corporation Asia (Hong Kong)

- Migrated multi-scenario stochastic economy simulation program from VBA to Python, and future optimised program to reduce runtime by 60%, assisted the production usage by creating demo and troubleshoot with teammates, and helped debug and fixed bugs and issues encountered.
- Automated multiple core reporting processes including introducing auto-boot web-crawler, large scale VBA automation tools, schedule vm startups and job scheduling and status report via email.

## PROJECTS

Polymorphism, Factory, Adaptor, Singleton.

### Programming Project Management

- Jira, Scrum, Waterfall, Agile, Entity Diagrams, User Stories, Design Principles. Sprints, Backlogs.

### Projects Flare Network Time Series Oracle

- Top performing real time price provider with data pipeline and machine learning predictive analysis, sourcing real time price feed data from over 100 crypto exchanges by integrating Rest API and web-sockets.
- Full-stack web application written in Nextjs and Java spring boot with over 13K monthly active users, deployed on AWS Kubernetes.
- GitHub: <https://github.com/ivy-oracle/web> & <https://github.com/ivy-oracle/api>

### Facial Recognition Database Management System

- Integrate facial identification, comparison and landmark identification machine learning models into Python Flask web service for a full managed software as a service hosted on Heroku.
- Next.js frontend with onnx library compiled into web assembly module to load facial recognition model to perform model inference from the client side.
- Github: <https://github.com/ivan-ngchakming/facial-recognition-api> & <https://github.com/ivan-ngchakming/facial-recognition-web>

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## EDUCATION

2018-09 - **BSc in Actuarial Science**  
2022-07 The University of Hong Kong  
The University of Hong Kong Sep 2018 - Jul 2022  
BSc in Actuarial Science (GPA: 3.18); Minor in Computer Science (GPA: 3.62)