Lewis Cheung

Full Stack Developer

Location Toronto, Ontario LinkedIn https://www.linkedin.com/in/hoipangcheung/

GitHub https://github.com/HoiPangCHEUNG

Email hoipang1e06@gmail.com Portfolio https://hoipangcheung.github.io/

(eligible to work in Canada)

Work History

Full Stack Developer | (11/2020 - 09/2022) | South China Morning Post

Experienced in full stack development with a track record of success in building collaborative editing solutions using Agile Scrum methodology. Skilled in Node.js, Vue.js, and React.js. Demonstrated expertise in cooperating with cross-functional teams, optimizing system performance, and mentoring junior developers. Proven ability to migrate to new technologies, reduce costs, and improve development speed.

- Key Contributions

- Independently implemented LiveBlog feature enabling editors from different countries to work on ongoing topics simultaneously without duplicating work.
 - Sample article built on this feature:
 https://www.scmp.com/sport/rugby/hk-sevens/article/3198601/hong-kong-sevens-20
 22-live-coverage-day-3-quarter-finals-get-under-way
- Boosted development speed by 50% by adopting CompositionAPI and migrating from Vue2 to Vue3.
- Replaced Drupal with our solution to save 760k USD annually.

- Duties

- Designed and developed an **Event-sourced** backend using **CQRS** architecture, ensuring high availability, scalability, fault tolerance and instant replay of previous edits.
- Established and managed RabbitMQ to publish/subscribe updates for effective communication between asynchronous systems.
- Revamped the workflow of WebSocket to tackle race conditions.
- Teamed on user-centric design strategy in translation of UI/UX and business requirements into coded solutions.
- Reviewed codes from other peers and offered technical advice or solution.
- Investigated unusual CPU spikes in **Kubernetes** cluster to prevent unexpected downtime of applications.
- Integrated and maintained third-party services such as Google, Youtube, and Twitter.
- Built automated test suite and script for CI/CD.
- Optimized performance of service & database components.
- Participated in user story analysis, solution design, and task allocation among teams.
- Guided and mentored junior developers to keep codes maintainable and easy to understand.

- Tech Stacks

- Backend: Node.js with Express, MongoDB, RabbitMQ, Event sourcing, CQRS
- Frontend: Javascript with Vue.js & React.js, Typescript, Material UI, HTML5, CSS, Vuetify
- Testing: Python with Pytest, Javascript with Jest, Sinon
- General: Docker, Kubernetes, CI/CD, Restful API, GraphQL, Git, GitLab, GitHub, Jira, AWS(EC2, S3), Socket.io, Vuex, Redux, WebSocket, rate-limiting, Microservice, JWT, Web development, npm, Responsive, Babel, Webpack, OpenAPI (Swagger), Postman, VSCode, non-relational databases (NoSQL), Google Analytics

Software Developer | (01/2019 - 10/2020) | Prisec Limited

Expertise in building efficient and scalable backend systems, designing and developing APIs, and implementing automated testing processes. Skilled in containerization, microservices architecture, and data processing with Python. Strong collaborator and team player with a focus on delivering high-quality, data-driven solutions.

- Key Contributions

- Designed and built an authenticator on top of **OIDC** protocol for hassle-free registration and login, while maintaining user anonymity.
- Implemented a highly efficient **Python WebCrawler** capable of automatically fetching and filtering **millions of rows of targeted data** daily, allowing for easy analysis and processing.

- Duties

- Developed and maintained automated test suite for any proposed feature changes, ensuring high-quality code and minimal bugs.
- Designed and implemented a scalable and robust **gRPC** API for mobile applications, providing fast and efficient authentication and authorization.
- Containerized applications using Docker and Kubernetes, streamlining development and deployment processes.
- Collaborated on code restructuring to adopt the **microservice** architecture, enhancing system flexibility and scalability.
- Created and optimized a **Python WebCrawler** capable of retrieving and processing large volumes of online data for analysis, contributing to data-driven decision-making.

- Tech Stacks

- Backend: Golang with gRpc, GORM, MySQL, Python with Django, Redis
- Frontend: Flutter, Dart
- Testing: Python with Pytest, Selenium
- General: Redis, Docker, Kubernetes, CI/CD, Restful API, GraphQL, Git, GitLab, GitHub, Kanban, Test-driven-development, Micro service, DevOps, relational databases (SQL), Linux, Ubuntu, Single Sign-On(SSO), OAuth2.0

Education

Bachelor of Engineering in Information Engineering (Class of 2019)

The Chinese University of Hong Kong