

Hongfei Zhou

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I have 11+ years of technical experience in backend development, testing and deployment. Familiar with Google Cloud Platform and Kubernetes. Building global sites with different tech stacks and various mainstream utilities. Have worked on developing backend, frontend, CI/CD, and automation platforms.

Key Skills

- **Programming Language:** Kotlin, Java, Python, Swift
- **Backend:** Spring Boot, JPA, Spring MVC, RESTful Service, GraphQL, GRPC
- **Cloud:** Google Cloud Stack (GCS, Pub/Sub, Big Query, Network, etc), Kubernetes, Docker.
- **Database:** PostgreSQL, OpenTSDB, DBT, Big Query, Big Table, MongoDB.
- **Tools:** Gradle, Maven, Jenkins, Spinnaker, JUnit, TestNG, Git, Linux.

Experience

Senior Software Engineer @ Crisp Inc. (Motiion Inc.), from 2019.04 to present

- Developer for backend with **GraphQL** and **Kotlin**.

GraphQL-based backend API for various features including serving and processing data, and using federated GraphQL to service request from multiple services.

Developing backend services with Spring Boot, GRPC, Hibernates and PostgreSQL.

Integrating with third-party services like Gmail and Twilio.

Collecting metrics with Prometheus and GCP Stackdriver. Creating alert policies based on metrics. Alert with Pager Duty.

- Developer for report download from various sources including Web Portal and API using **WebDriver** and **WebClient**.

Leveraging Selenium WebDriver to automate the downloads for vendor reports from various sources.

- Rewrite the entire task execution framework for executing the downloading tasks.
- Using Pub/Sub to enable async processing for downloaded reports and integrate services with Big Query and Google Cloud Storage.
- Developer for infrastructure management with **GCP** and **Kubernetes**.
 - Manage backend deployments, monitoring, logging and networks.
 - Using scaffold and kustomize to ease the difficulty of composing k8s manifest.
 - Familiar with various concepts of Kubernetes, including deployments, services and auto-scaling.
 - Using Google Cloud DNS and Load Balancer to enable network access for internal services.
 - Maintaining Jenkins pipeline with Jenkinsfile.
- Developer for **time series** building with **OpenTSDB** and **BigTable**.
 - Create Dataflow pipelines with Apache Beam to extract data from BigQuery, and save aggregated data to OpenTSDB backed by BigTable.
- Developer for frontend with **Typescript** and **React**.
 - Create simple react components for working with the backend.
- Developer for data transformation with **DBT** and **BigQuery**
 - Using DBT to create data transformation views in GCP BigQuery for supporting data visualization.

Senior Software Engineer @ StubHub, eBay Inc, from 2012.6 to 2019.04

- Lead developer for **Discount Cofund**. Implemented the feature and update iLog integration.
 - Add extra price items to the system and update the integration with iLog to take extra parameters for new price items.
- Lead developer for **Optimizely AB Testing**. Integrate the AB Testing with Optimizely.
- Lead developer for **Price Markdown**. Design the structure and implemented the feature for marking down prices.

Leverage Java 8 & multi-threading & Couchbase to perform high-performance price markdown. Giving the business team the ability to adjust the price throughout the entire site.

- Lead developer for **Test Data Service**. Designed the architecture of system and implemented the backend of the system.

Using Java with Spring MVC to build a web service for serving test data. The system is built with MongoDB for data storage and Jenkins for data generation.

- Lead the development of **Test Execution System**. Designed the structure of both frontend and backend. Implemented frontend code and major backend code.

Built a system for executing automation testing. Using Java/Spring MVC/AngularJS to build the system. Data storage is done by MongoDB. Test execution with Jenkins. The system is also integrated with JIRA to periodically update TC information.

- Solely designed the structure of **API automation framework** and implemented both **API framework** and **responsive web page framework**.

Using Java and URLConnection to build an automation framework for testing SOAP and RESTFul API. Integrated the system with the existing UI testing framework, including life cycle management, logging and report generation.

Education

- **Bachelor of Engineering, Computer Science**, Shanghai Jiaotong University, 2008 - 2012.