

# Huang Liang

SITE RELIABILITY ENGINEER · PAAS ENGINEE

Pudong, Shanghai

### **Education**

**Zhengzhou University** 

Zhengzhou, Henan

2007/9 - 2011/7

**B.S. IN TELECOMMUNICATION ENGINEERING** 

## Skills.

Cloud Native Technologies AWS, Kubernetes, Docker, Prometheus, Rancher, Packer, Terraform, Jenkins, Argocd

**Programming** Golang, JAVA, Node, Shell scripting **Back-end** Gin, go-gorm, Spring, REST API

**Languages** English, Mandarin

# **Summary**\_

Experienced professional with 11 years in tech. Began with 6 years as an application developer, followed by 5 years focused on infrastructure.

Have hands-on expertise in managing both on-premises infrastructure and public cloud environment(like aws, azure).

Dedicated Kubernetes specialist with 5 years of hands-on experience in cluster operations.

Proven expertise in harnessing the Operator pattern to seamlessly integrate infrastructure and operational capabilities within Kubernetes.

Good understanding of Kubernetes and its components (including but not limited to CSI, CNI, and CRI). Familiar with common network solutions such as Calico, Flannel, and Weave.

Proficient in leveraging the CNCF ecosystem to drive business benefits and streamline development processes.

# Work Experience

#### Wish Inc.

SENIOR INFRASTRUCTURE ENGINEER

2022/11 - 2023/8

- Leveraged the Kubernetes Operator Pattern: implemented a controller to manage Kafka topic provisioning by using crossplane/provider-template.
- Kubernetes Cluster Management on AWS: Upgraded EKS(Amazon Elastic Kubernetes Service) from version 1.21 to 1.24 with Blue-green upgrade strategy without causing any downtime.
- Container Runtime Migration: Migrated Kubernetes container runtime from Docker to Containerd to align with industry standards.
- Container Storage Interface Migration: Migrated Kubernetes from in-tree storage plugins to Container Storage Interface (CSI) drivers and ensuring the smooth transition for end-users.
- Contribute to internal developer platform: streamlining workflows and automating processes with argood, crossplane and OAM(kubevela), resulting in faster development cycles and increased business impact

#### Paypal Inc.

Kubernetes Admin & PaaS engineer

2020/6 - 2022/10

- Leveraged the Kubernetes Operator pattern: implemented a controller to manage Elastic Load Balancers in PayPal's private data centers for Kubernetes clusters, enhancing provisioning efficiency and resilience.
- Kubernetes Bootstrapping & Scaling: Designed and executed a specialized tool for bootstrapping and scaling Kubernetes, tailored specifically to the network and security specifications of FinTech systems.
- SSO Integration & Deployment: Spearheaded the integration of Single Sign-On (SSO) capabilities from its inception, further broadening its application across the entire platform, enhancing security and user experience.
- Alerting System Integration: Seamlessly integrated both Prometheus and Zabbix to establish a robust alerting mechanism, ensuring real-time monitoring and rapid issue resolution.

#### eBay Inc. (via outsourcing)

Devops engineer & Kubernetes Admin 2018/7 - 2020/5

- Kubernetes Cluster Management on Azure: Led the deployment, optimization, and secure management of Kubernetes clusters on Azure VMs, ensuring consistent uptime, peak performance, and seamless upgrades.
- Rancher Deployment: Successfully deployed Rancher for organizational use and extended its capabilities to customers, simplifying the management and scaling of containerized applications.
- Real-time Monitoring Solutions: Designed and implemented monitoring infrastructures using Prometheus, delivering real-time insights into cluster performance and significantly expediting troubleshooting efforts.
- CI/CD Integrations: Pioneered the architecture and deployment of Jenkins-based CI/CD pipelines, accommodating daily updates and agile weekly releases in response to evolving business needs.
- Cluster Automation: Authored advanced automation scripts in Shell, Python, and Ansible, streamlining cluster management and minimizing the need for manual oversight.

#### eBay Inc. (via outsourcing)

 FULL STACK ENGINEER
 2016/3 - 2018/6

- API Gateway Implementation: Created a Node.js-based API gateway that smoothly integrated new backend services while preserving the legacy system. Implemented metrics for valuable business insights.
- User Experience Enhancement: Revamped the website using ReactJS and Redux, resulting in a 30% decrease in user-reported issues and improved user satisfaction.
- · Cross-Team Collaboration: Established effective communication channels between American teams to ensure global standards alignment.
- Quality Assurance: Conducted regular code reviews, reducing post-deployment bugs by 10% and maintaining coding consistency.
- Technical Documentation: Authored comprehensive technical documentation to enhance inter-team collaboration.

#### Ericsson Inc. (via outsourcing)

JUNIOR JAVA ENGINEER 2014/5 - 2016/3

- End-to-End Development Contribution: Actively participated in the complete software development life cycle, from demand analysis to design and documentation.
- · Agile Development: Successfully delivered a series of system improvements using the Scrum methodology.
- · Efficient Software Delivery: Adopted continuous integration practices, leading to improved software quality and faster release times.
- · Quality Assurance Tools: Aided in the development of advanced testing tools and simulators, ensuring a higher standard of product reliability.
- · Technical Documentation: Authored and maintained detailed technical documents, including UML-based design proposals and user guides.

#### **Tata Consultancy Services (TCS)**

JUNIOR JAVA ENGINEER 2012/5 - 2014/4

- Online Quoting Tool: Key contributor to the development of a quick quote tool for bank brokers' websites, enabling customers to receive online indicative quotes with ease.
- Advanced Functionality: Developed the core calculation layer within an MVC pattern tailored to specific insurance business requirements, resulting in more efficient data processing.
- Quality Assurance & Documentation: Spearheaded the creation of project documents, work quality records, and ensured software quality by isolating and resolving defects through rigorous testing phases.
- Database Modeling: Constructed persistent entities aligned with the business model, streamlining data storage and retrieval processes.