

Zhengyang Liu

Issaquah, WA

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Seasoned technical leader with 10+ years of experience in building cloud infrastructure with focuses on scalability, observability and reliability. Expert knowledge in computer networks and operating systems. Highly skilled in troubleshooting and low-level debugging.

Skills

- Expertise in *Kubernetes* and its ecosystem.
 - Expertise in the *Envoy proxy*.
 - Expertise in AWS services including *EKS, ECR, EC2, ELB, S3, DynamoDB, IAM* and more.
 - Expertise in Google Cloud services including *GKE, VPC IAM* and more.
 - Familiarity with Linux system programming and tracing frameworks.
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Experience

- **Snap Inc.** **Seattle, WA**
Staff Software Engineer, Service Infrastructure *Oct 2018 – Present*
 - Architecting and implementing next generation of Snap’s internal Platform-as-a-Service powered by multi-cloud, multi-tenant Kubernetes clusters and Envoy.
 - Defining roadmaps for service mesh including any service discovery and routing related projects, as well as developer experience initiatives to easy onboarding and increase developer velocity.
 - Designing and implementing advanced routing mechanisms to support varying use cases such as developer testing, A/B testing and gradual rollouts.
 - Mentoring junior engineers and interns.
 - Main technologies: Kubernetes, Envoy, gRPC, Protobuf, Golang.
 - **Amazon Web Services** **Seattle, WA**
Software Development Engineer II, AWS X-Ray *May 2017 – Sept 2018*
 - Led the effort to develop a bytecode instrumentation based system for JVM that enables dynamic tracing on production systems without re-deployment.
 - Extended the AWS X-Ray daemon to support mixed-origin traces to support multi-tenant AWS services such as AWS Lambda.
 - Profiled and optimized memory usage of the X-Ray daemon to meet resource constraints.
 - Main technologies: Java, Golang, Lambda, IAM.
 - Software Development Engineer II, Elastic Beanstalk* *Oct 2015 – May 2017*
Software Development Engineer, Elastic Beanstalk *Jan 2014 – Oct 2015*
 - Developed Custom Platform feature that allows Beanstalk customers to create any launch any platforms authored through *Packer*.
 - Integrated Elastic Beanstalk with EC2 Container Service and EC2 Container Registry.
 - Designed and implemented Elastic Beanstalk Docker platforms; oversaw the project from proof-of-concept to launch; implemented core components of the new platforms.
 - Main technologies: Docker, Java, Ruby, Linux, CloudFormation.
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Education

- **University of Virginia** **Charlottesville, VA**
Master of Computer Science *2011 – 2013*