



Casey Lee

Technology Leadership ☆ Cloud Architecture ☆ Software Engineering

- Passionate about applying DevOps practices in the enterprise.
- AWS Container **Hero**

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🔄 GitHub Projects

- **nektos/act** » Run your GitHub Actions locally
 - Fast feedback on the development of your GitHub Actions
- **stelligent/mu** » Continuous delivery of microservices on AWS
 - Developed based on best practices from past projects.
 - Used by AWS to develop a **workshop** to teach ECS.
- **stelligent/pipeline-dashboard** » Simple dashboard for pipelines on AWS
 - Capture continuous delivery metrics from AWS CodePipeline via serverless architecture
 - Deployable from **AWS Serverless Repo**

📌 Sharing

- Conferences
 - **AWS Summit DC 2021: Improve the developer experience with AWS CDK**
 - **Run GitHub Actions locally for fast feedback - GitHub Satellite 2020**
 - **DeliveryConf 2019: The Last Bottleneck of Continuous Delivery**
 - **AWS re:Invent 2019: From monolith to cloud native in 30 minutes or less! (DVC05)**
 - **AWS Summit 2019 - Santa Clara: Continuous Delivery on AWS with Zero Downtime (DEV10)**
 - **AWS re:Invent 2018: Containerized Workloads Made Easy with ECS, Fargate and EKS**
 - **AWS re:Invent 2017: Using AWS to Achieve Both Autonomy and Governance at 3M (DEV332)**
- Webinars
 - **AWS Containers from the Couch | Builders Series**
 - **AWS Heroes Panel | Open Cloud Innovations**
 - **Microservices as Containers on AWS...for Fun and Profit**
 - **AWS re:Invent 2017 DevOps Re:Cap**
 - **Dos and Don'ts for DevOps Automation on AWS**
 - **AWS re:Invent 2018 DevOps Re:Cap**
- Podcasts
 - **Last Week in AWS: Creating 'Quinntainers' with Casey Lee (Ep. 346)**
 - **DevOps on AWS Radio: Serverless Delivery with Casey Lee (Episode 2)**
 - **DevOps on AWS Radio: mu - DevOps on AWS tool (Episode 10)**
 - **DevOps on AWS Radio: Containers on AWS with Casey Lee (Ep. 21)**
- Blog Posts
 - **Cost optimization for Kubernetes on AWS (AWS Containers)**
 - **Faster Feedback for Delivery Pipelines with Skaffold (Liatrio)**
 - **Pipelines For Container Applications Made Easy with mu (AWS Open Source)**
 - **Announcing EKS Support in mu (AWS Open Source)**
 - **Introducing mu: a tool for managing your microservices in AWS (Stelligent)**
 - **Microservice testing with mu: injecting quality into the pipeline (Stelligent)**
 - **Microservice databases with mu (Stelligent)**
 - **Service discovery for microservices with mu (Stelligent)**
 - **Serverless Delivery: Architecture (part 1 of 3) (Stelligent)**
 - **Serverless Delivery: Bootstrapping the Pipeline (part 2 of 3) (Stelligent)**
 - **Serverless Delivery: Orchestrating the Pipeline (part 3 of 3) (Stelligent)**
 - **Microservices Platform with ECS (DZone)**
 - **Drift Detection in Continuous Delivery Pipelines (DZone)**
 - **More DZone posts... (DZone)**

📁 Professional Experience

- CTO, Gaggle, Sacramento, CA (Jul. 2020 – present)
 - AWS** **CDK** **Java** **Python** **Go** **Node.js**
 - Led a transformation of the technology organization to increase speed and safety of software delivery.
 - Scaled the software engineering organization through autonomous teams.
 - Oversaw product management functions. Worked with customers and stakeholders to build prioritized product roadmaps.
 - Led the machine learning team to improve the precision of our models to reduce false positives and thereby driving down costs.
 - Architected plans for migration of the remaining workloads from on-premise datacenter to AWS public cloud.
- Director of Engineering, Liatrion, Sacramento, CA (Feb. 2019 – Jul. 2020)
 - AWS** **Kubernetes** **Terraform** **Java** **Python** **Go** **Node.js**
 - Led the engineering practice for Liatrion. Oversaw the hiring, development and retention of engineers who worked with clients to increase the speed and safety of software delivery.
 - Established internal "flywheel" program to continuously improve engineer skills by rotating them off the client for 1 week a quarter to focus on building new capabilities using modern engineering tools and practices.
 - Worked with customers to address their organizational and technical challenges through the use of techniques such as automation, self-service and fast feedback.
 - Developed immersive learning experience called "Ignite Lab" to offer a multi-day hands on environment for engineers to learn and apply cloud native practices.
 - Increased brand awareness in DevOps community through blog posts, webinars and public speaking.
- Chief Architect/VP Engineering, Stelligent, Sacramento, CA (Jan. 2016 – Jan. 2019)
 - Java** **Python** **Go** **Node.js** **AWS** **Kubernetes**
 - Led the engineering practice for Stelligent. Oversaw the hiring, development and retention of the best DevOps engineers in the industry. Grew the team from 30 to 60 engineers and built out middle management to support growth.
 - Worked with sales to deliver a 2x growth revenue over 12 month period.
 - Worked with customers to assess requirements and then architect and deliver solutions to help them increase the speed and safety by which they deliver their applications.
 - Increased brand awareness in DevOps community through blog posts, webinars and public speaking.
 - Led the development of repeatable solutions for continuous delivery pipelines in AWS.
 - Supported the acquisition and integration of the organization by **HOSTING** and then **Mphasis**.
 - Customer Case Studies
 - **3M**
 - **Verizon**
 - **Washington Post**
- Enterprise Architect, VSP Global, Sacramento, CA (Jun. 2013 – Jan. 2016)
 - Java** **Node.js** **JAX-RS** **Spring** **Maven** **AWS** **Chef** **Docker** **Tomcat**
 - Selected to serve as enterprise architect for VSP Global providing direction across all lines of business for infrastructure, data, application and business architecture.
 - Led the migration of architecture for the organization from SOAP services on WebSphere running on AIX to REST APIs on JBoss and Tomcat running on Linux saving hundreds of thousands of dollars in license costs
 - Implemented DevOps tooling and processes for the organization including automation with Chef and virtualization on both AWS and VMware to provide developers with self service capabilities to provision machines in minutes rather than days
 - Architect security around the APIs and websites using industry standards such as OAuth 2.0 and OpenID Connect
 - Established an Open Source Software contribution program to encourage developers to engage and contribute back to the open source community
 - Initiated research and development efforts around Spring Boot and Docker including proof of concepts and adoption roadmaps
 - Educated and supported the development teams on the adoption of the new technologies
- Staff Application Developer, Vision Service Plan, Sacramento, CA (Aug. 2005 – Jun. 2013)
 - Java** **JAX-WS** **JAX-RS** **Maven** **WebSphere** **DB2**
 - Selected to serve as a technical specialist on the design, architecture, and development of software systems.
 - Led team of engineers to design, develop and support a web-based CRM system for use by the 500+ customer service representatives to replace 20+ year old legacy mainframe applications and handle over 20,000 live phone calls per day.
 - Led the research and acquisition of a Case Management and BPM system for the support of the workflows between our Claims, Customer Service, Fraud and Provider Relations groups. The

- implementation of the new system realized a savings to the business area of over \$600,000 annually.
- Championed the adoption of the Scrum methodology on our project team and evangelizing agile practices to the rest of IT such as TDD, Continuous Integration via Jenkins, short sprints of less than 2 weeks, story points and team collocation.
- Received a Platinum Award (given to one employee annually) for implementing an OSGi framework in our SOA enabling local service bindings with performance improvements that allowed for a savings of 10+ seconds per phone call realizing a savings to the company of over \$800,000 annually.
- **Senior Software Engineer, O1 Communications, Sacramento, CA (Mar. 2003 – Aug. 2005)**
 - C/C++** **Java** **SS7** **SIP** **Linux** **MySQL**
 - Selected to serve as a technical specialist on the design, architecture, and development of software systems and software projects.
 - Led team of engineers to design, develop and support a softswitch providing SIP (RFC 3261-3265) to ISUP (ANSI T1.113) gateway service to a statewide VoIP network written in C. Supported TCAP (ANSI T1.114) and ENUM (RFC 3761) for IN infrastructure.
 - Led team of engineers to design, develop and support a RADIUS (RFC 2865-2866) application capable of handling more than 10 million calls per day.
 - Instrumental in the design and implementation of a data driven MVC (Model View Controller) architecture for company core software application utilizing proven patterns and best practices.
- **Senior Application Developer, Innotas, Sacramento, CA (Mar. 2001 – Mar. 2003)**
 - Java** **Struts** **Tomcat** **Ant** **Oracle**
 - Selected to serve as a technical specialist on the design, architecture, development and maintenance of software systems and software projects.
 - Led team of engineers to develop and support core software using the eXtreme Programming methodology for a Project Portfolio Management software application.
 - Instrumental in the design and implementation of a data driven MVC (Model View Controller) architecture for company core software application utilizing proven patterns and best practices such as JSP, Tiles, Struts, and EJB .
- **VP Technology, The Grid, San Luis Obispo, CA (Mar. 1996 – Sep. 1999)**
 - Partnered on the start-up of an Internet Service Provider; eventually sold to OneMain.com.
 - Developed core intranet providing a web-based CRM, accounts receivables, lead tracking, human resource management, marketing and finance reporting, and trouble ticketing to the company.
 - Designed, implemented and managed a complex statewide DS3 network with multiple BGP peers, digital modem pool of over 5000 modems and server clusters of web, email, and DNS utilizing Sun servers, Cisco routers, switches, and firewalls.
 - Instrumental in planning the integration of the 20 acquired ISPs and 750,000 dial-up subscribers into a single network infrastructure yielding an aggregate cost of access revenue at 28% of total revenues.

Education

Degree	Major	Institution
	Computer Engineering	California Polytechnic State University-San Luis Obispo

Publications

- **JAX-RS: Java™ API for RESTful Web Services, Version 2.1 Proposed Final Draft, June 15, 2017.**