I am engineering leader that loves to help mentor and build teams. I believe in promoting a customer-centric culture and focus on teaching teams on how to scale their systems and organizations. I mentor folks to work collaboratively to communicate and coordinate effectively within an organization.

Experience

CO-FOUNDER AND MANAGING PARTNER, Real Kinetic, Dec 2016 to Jan 2019

Mentored clients to help enable their technical teams to grow and build high-quality software. We used a holistic, team-based approach to accelerate delivery, but in a way that makes execution more sustainable long-term. This includes working through deep technical problems—such as cloud architecture, performance, and scalability—as well as organizational processes and leadership mentoring.

Engagements included a focus on building great engineering organizations. We helped with many different aspects, including:

- Organizational Structure
- Product ownership
- Leadership and mentorship
- Cross Team Coordination
- Company Alignment and communication (with a focus on OKRs)
- Hiring and employee development

Focused on helping clients develop new or migrate existing systems to cloud environments. We provided guidance, training, and hands-on support of many cloud-based services.

- Runtime systems: Kubernetes, Cloud Functions, and Google App Engine
- Data storage: RDS, CloudSQL, CloudDatastore, BigQuery, S3
- Data processing: Dataflow, Cloud Pub/Sub, SQS, Kinesis
- Architectural guidance focused on fault tolerance and scalability
- Multi-tenancy support and the impact on the infrastructure as well as services such as authentication and authorization.

Helped clients transition to a DevOps culture. Focusing on continuous delivery and solving infrastructure needs via products and code verse manual processes.

- Help teams understand their security and compliance needs
- Automating processes into their CI/CD pipeline
- Provide support of zero downtime deploys
- Data Pipeline for observability tools

SENIOR DIRECTOR OF ARCHITECTURE, Workiva, Jan 2011 to March 2017

Lead a group of architects and teams to develop Workiva's collaboration and data platform. Collaborated with leaders and teams to help architect, engineer, and deliver systems and services.

Worked with Engineering and Product Managers to drive requirements and set goals via OKRs

Projects and Initiatives

Developer Lifecycle

Worked with other leaders and the engineering teams to transition from quarterly releases to teams having the ability to release multiple times a day. We leveraged agile, a product mindset, and a DevOps driven culture where processes were automated around the developer lifecycle to allow full team ownership. We built a CI/CD pipeline with compliance checks and security reviews built in as customer data privacy and protection was a top priority.

Microservice Based Platform

Lead a group of architects and engineering teams to design and build a new microservice based platform to support Workiva's next generation of products and services. The systems included: Platform wide message bus including pub/sub support, durable event streams built on top of AWS Kinesis, table-based calculation engine, and a platform-wide integrated tracing system

Calculation Service (https://www.google.com/patents/US20150026230)

Created a distributed, graph-based service for calculating user-created formulas. This included hiring and mentoring a team to continue the development and maintenance of the service. This was developed with Python on top of Google App Engine. The algorithm is built around idempotent tasks, message passing and an adjacency list for tracking status. We built an async workflow library for managing the process on task queues

(https://github.com/workiva/furious). I also created a profiling tool for visualizing calculations and a chaos library for triggering latency spikes and failures on Google App Engine.

Prior Experience

- SOFTWARE ENGINEER, Quality Attributes Software, April 2009 to Dec 2011
- SOFTWARE ENGINEER/ARCHITECT, EFCO Corp, 2004 to March 2009
- SOFTWARE DEVELOPER / FREELANCER, Self Employed, 2000 to 2009

Education

IOWA STATE UNIVERSITY

Bachelor of Science, Management Information Systems, 2003