About Me



Hello there! I'm Mike, your go-to Site Reliability Engineer, DevOps Maestro, and Platform Engineer all rolled into one. With a toolkit of finely sharpened skills, I'm on a mission to architect solutions that turbocharge efficiency, elevate performance, and fortify security for businesses.

Regarded as a powerhouse of efficiency fused with a spark of creativity, I thrive in the art of balancing multiple priorities with grace and precision. Navigating through the complexities of various IT landscapes, I've become a master troubleshooter and a champion of system and project management. My enthusiasm for automation has not only streamlined operations but has also led me to create impactful software and web applications that continue to serve as industry benchmarks.

My journey through a mosaic of organizations has been nothing short of an adventure, enriching me with a treasure trove of teamwork acumen and leadership finesse.

When it comes to my superhero skills, I wield the powers of AWS and Kubernetes with unmatched expertise. Ready to infuse a dose of fun and professionalism into your tech universe? Let's connect and make magic happen! 🛠

Experience

Kubernetes clusters everywhere!

- Tasked with ensuring the optimal availability, performance, and efficiency of both legacy and new services, encompassing monitoring, emergency response, and strategic capacity planning. • Entrusted with the management of Kubernetes clusters as part of the core infrastructure team, emphasizing
- stability and scalability.
- Spearheading the automation of Kubernetes application deployments to streamline operational workflows and enhance deployment efficiency.
- Pioneering the development of Kubernetes Controllers using Go Lang, contributing to enhanced automation and management capabilities within the Kubernetes ecosystem. Adhering to GitOps and Infrastructure as Code principles to maintain consistency, reliability, and version control in

• Championing the automation of various workflows, facilitating a seamless and efficient operational environment.

- infrastructure management, reinforcing best practices and operational excellence. I provided training, mentorship, and support to junior team members, fostering their professional development and
- integration into the team.

To break down barriers that limit people from getting quality healthcare, empowering them to live happier lives.

Lemonaid Health Site Reliability Engineer

Autodesk

autodesk.com

Taos

taos.com

DevOps Engineer

Principal Site Reliability Engineer

February 2016 - May 2021

Autodesk

Dec 2021 - Present

autodesk.com

Principal Software Engineer

July 2021 - Dec 2021 lemonaidhealth.com

• Responsible for availability, performance, efficiency, change management, monitoring, emergency response, and

capacity planning.

• Sticking to Infrastructure as code.

Making sure we stick to our SLA.

Working with security to make sure we are compliant.

automation and eliminating manual setup processes.

Automating all the toil.

Make anything but make it immutable!

- Engineered and implemented automation processes that empowered teams to deploy, manage, configure, test, scale, and monitor their applications efficiently using advanced tooling or scripting, significantly accelerating the delivery of new features to production. Enhanced automated testing and simulation frameworks to improve accuracy and reliability in software testing
- processes. Designed and deployed Docker containers to transition from monolithic architectures to microservices, thereby enhancing developer workflow, scalability, and execution speed.
- Developed custom monitoring plugins and seamlessly integrated monitoring strategies into deployment workflows, leading to the creation of self-regulating solutions. Advocated for and implemented Infrastructure as Code (IaC) practices across all projects, ensuring complete
- Took ownership of production alerts, serving as the primary contact for addressing and resolving infrastructure or application incidents. Achieved significant cost savings for the company by identifying and eliminating superfluous AWS resources and
- optimizing the sizing of AWS assets. • Collaborated with colleagues on the innovation of new automation tools and services, contributing to the efficient
- management and upkeep of diverse virtual environments. Provided expert consultation on system architecture, contributing to the strategic planning and design of robust technological frameworks.
- Formulated and automated standard operating procedures for common failure scenarios, enhancing system resilience.
- Conducted thorough monitoring, analysis, and reporting of performance metrics for cloud-hosted environments
- and applications, ensuring optimal performance.
- Contributed to the development of application features and enhancements, prioritizing functionality and user experience.
- Committed to writing clean, well-documented, and resilient code, adhering to best practices in software development. Oversaw the management and maintenance of databases utilizing MySQL, Postgres, and DynamoDB, ensuring
- data integrity and availability. • Managed and scaled the infrastructure for QA, Development, Staging, and Production environments, supporting
- over 5 million monthly users, ensuring high availability and performance.

• Served on the SaaS team at Autodesk, where I played a pivotal role in enhancing the company's cloud-based

Out with the old, in with the new.

• I facilitated the migration of applications from traditional data centers to AWS, streamlining the process by

implementing comprehensive automation for all related tasks. Led the transformation of their monitoring system, refined metrics, augmented logging capabilities, and fostered improved communication channels across various teams, contributing to a more cohesive and efficient operational framework.

- · Successfully deployed and ensured the ongoing maintenance of several key company applications, ensuring their optimal performance and reliability. • Provided dedicated support to engineers on automation-related challenges, aiding in the resolution of issues and

Supported the development team in crafting an internal tool designed to oversee Apple's complete phone support

Different colored apples everywhere.

Advantis Global

September 2014 - February 2016

April 2014 - September 2014

DevOps Engineer

- ecosystem. Engineered a Chef Server from scratch within a constrained environment to ensure its seamless operation in a
- production setting. Provided guidance to various departments in integrating their projects, facilitating smooth onboarding processes.

The DevOps philosophy was bestowed upon me here. Created and managed security systems for the Building, Network, Workstations, and Servers.

OneHealth Solutions Junior DevOps Engineer Jan 2011 - September 2013

- Tested and troubleshot hardware, software, and network connectivity issues. Documented installations, application/system maintenance, hardware devices, and end-user support.
- Managed, defined, upheld Service Level Agreements, and Enforced HIPAA compliance. Performed basic workstation training and support for all employees.

the advancement of automation practices within the team.

If you can think outside the box, you can find bugs for days. • Developed and oversaw the implementation of comprehensive security protocols for the infrastructure encompassing buildings, datacenter, networks, and workstations.

Mellmo **QA Engineer** 2008 - 2010 roambi.it/en/

- Conducted thorough testing and troubleshooting of hardware, software, and network connectivity to ensure optimal operational efficiency.
- Meticulously documented the procedures for installations, maintenance of applications/systems, hardware devices, and provided detailed guides for end-user support. Administered Service Level Agreements (SLAs), ensuring they were consistently met and maintained, while also
- ensuring strict adherence to HIPAA regulations for data privacy and security. • Delivered fundamental workstation training and support to all employees, enhancing their proficiency and ensuring
- smooth daily operations.

Technical Skills

Here is a list of some of my skills:

- Adept at command line interfaces, executing intricate operations effortlessly. • Proficient in Continuous Integration and Continuous Deployment (CI/CD) with tools like Argo Workflows, GitHub Actions, Jenkins, RunDeck, and an in-depth understanding of Kubernetes for orchestrating containers.
- Well-versed in cloud platforms, specifically AWS and Azure, for managing robust cloud infrastructures. • Knowledgeable across a variety of operating systems, including Ubuntu, Debian, CentOS, and Red Hat.
- Skilled in leveraging APIs for AWS, Slack, Jira, Confluence, PagerDuty, Jfrog Artifactory, and integrating with Bitbucket for source control and collaboration. Fluent in coding with Bash, Ruby, Python, and Go. Expert in Infrastructure as Code (IaC), utilizing AWS ACK controllers, various Kubernetes controllers including Kubebuilder for extending Kubernetes, Boto3,

Familiar with data science tasks, employing Pandas for data analysis and manipulation.

- Terraform, Terragrunt, CloudFormation, AWS CDK, and Elastic Beanstalk. • Experienced in configuration management with Chef/Chef Zero, Habitat, Packer, and Capistrano. • Competent in testing methodologies using Ginkgo, Pytest, Selenium, Test-Kitchen, Vagrant, and Inspec.
- Proficient in container technologies like Docker, ECS, Kubernetes, and utilizing Jfrog Artifactory for artifact management and distribution. • Knowledgeable in serverless frameworks, particularly AWS Lambda. • Experienced in managing web and application servers, including Apache, Nginx, Passenger, Puma, Unicorn, Flask, Quart, and Tomcat.
- Skilled in database management with systems such as MySQL, Postgres, and DynamoDB. Proficient in message brokering with RabbitMQ and caching solutions with ElastiCache Redis. Well-versed in security protocols and tools, including LDAP, AuditD, OpenVas, Rkhunter, Chkrootkit, Nexpose, Snort, Squirt, and ClamAV. • Skilled in version control using Git and SVN, and experienced with Bitbucket for repository management.
- Experienced in web frameworks like Rails, Jekyll, and Drupal. • Adept at system and infrastructure monitoring with tools such as the ELK Stack, NewRelic, Nagios, Sensu, CloudWatch, Splunk, God, Monit, Grafana, and PagerDuty.
- Certifications

Coursera - Site Reliability Engineering: Measuring and Managing Reliability

- CompTIA Project+ CompTIA - A+ • CIW - Web Design Specialist

CompTIA - Security+

• 🗑 Arduinos
 Gardening

Michael Roth - mikeroth.sd@gmail.com - References on request

A Little More About Me

• Cooking • 📥 Cars • 🖨 3D Printing

Aside from my interests in work some of my other interests and hobbies are: