Carl Jerritt Aquino

✉ jerritt.aquino@gmail.com ↖ carljerrittaquino.com ○ cjaquino 📍 Snellville, GA

Profile

I am a software engineer with experience in Go, Javascript, TypeScript, Python, React/Redux, PostgreSQL, MongoDB, AWS, and GCP. I am a co-creator of Pilot, an open-source, multi-cloud framework for provisioning an internal PaaS with a workflow-agnostic build, deploy, and release pipeline.

Experience

Pilot Framework, *Co-Creator, Software Engineer*   May 2021
https://pilotframework.com/ ⬈
Pilot is an open-source, multi-cloud framework for provisioning an internal PaaS with a workflow-agnostic build, deploy, and release pipeline.
Technologies: TypeScript, Go, gRPC, Docker, Terraform, AWS / GCP

- Led the design of how Pilot automates the provisioning of resources to AWS and GCP using Terraform.
- Led and designed CLI tool for Pilot setup, configuration, application deployment, SSH access, and teardown.
- Configured cloud-init to bootstrap AWS EC2 and Google Cloud Compute Engine with the necessary software.
- Utilized a custom Docker image that provides the custom plugins needed for multi-cloud deployments.
- Contributed to manual testing of internal PaaS components and lifecycle of deploying applications to ensure expected functionality.
- Created and published the npm package for the CLI tool
- Co-authored a technical case study documenting our design decisions and challenges.
- Designed diagrams to visually explain Pilot's architecture.

MR Systems, *Applications Engineer*   May 2017 – Sep 2020

- Technical Lead - Led a team in developing two distributed applications that communicate to and store data from devices at different locations.
- Designed, developed, and deployed Human-Machine Interfaces (HMI) to PLC-based automation and control systems for the water and wastewater industry using industry-standard HMI software.
- Designed and built an internal library in Python to optimize feature development for HMI interfaces.
- Designed and developed automated reporting systems using SQL and Excel to improve plant observability.
- Troubleshot communications in industrial computer networks.

CITI, LLC, *Project Engineer*   Nov 2015 – May 2017

- Designed and developed HMI applications using Wonderware's InTouch or Inductive Automation's Ignition.
- Designed HMI applications that integrate with PLC and third-party vendor systems.

Skills

Languages
Go, JavaScript, TypeScript, Python, SQL, HTML, CSS

Frameworks
React/Redux, Express, Node, Handlebars, jQuery

Technologies
Git/GitHub, Docker, REST APIs, Terraform, Waypoint, PostgreSQL, SQLServer, MySQL, MongoDB, VMWare

Cloud
EC2, ECS, ECR, S3, IAM, VPC, CloudFront, Compute Engine, Cloud Run, Google Cloud Storage, Container Registry, Cloud CDN, Heroku, DigitalOcean

Education

B.S. Computer Engineering, *Mercer University*   2010 – 2015