

Raul de Hevia

SOFTWARE ENGINEER

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EXPERIENCE

INTUITIVE SURGICAL

Software Engineer III - Platform

Feb 2022 – Present | San Francisco, CA

- Led the end-to-end design and implementation of an AWS-hosted platform written in Go (Golang), empowering the Ops team to remotely manage and update a vast fleet of VMs in US hospitals. Projected to save the company hundreds of thousands of dollars in operational costs.
- Architected a Go client that encapsulated Ansible, enabling reliable HTTP connectivity, idempotent updates, and fault tolerance; implemented automatic rollback mechanism for seamless application reversion on failure.
- Designed CI/CD workflows using CircleCI, AWS S3, and ECR to automatically deliver update scripts and artifacts to the Platform, reducing update delivery time by 40%.
- Developed a Python-based DICOM to NIFTI converter service, enabling seamless integration of CT and MR scan data into external applications for enhanced visualization and analysis.
- Redesigned all workflows of a TypeScript backend service for retrieving and processing DICOM files, resulting in an 80% reduction in retrieval time (from minutes to seconds) and enhancing the user experience.
- Built an Observability platform with a custom alerting system using Elasticsearch, Kibana, Docker, Go, and AWS SNS, enhancing service visibility and reducing incident response time by 30%.

MONSOON

Software Engineer, Co-Creator

Jul 2021 – Feb 2022 | San Francisco, CA

- Engineered highly scalable, serverless load-generation engine using Node.js, AWS ECS, Fargate, EventBridge, and Lambda, enabling SRE teams to load-test web applications with up to 20,000 headless Chrome instances.
- Architected a robust queuing system with AWS EventBridge and Lambda, enabling independent component scaling and preventing cascading failures.

ARUP

Structural Engineer IV

Apr 2019 – Dec 2020 | San Francisco, CA

- Point of contact of the retaining wall team in the I-405 Highway Project; led communication and coordination with other engineering groups and contractors, ensuring timely project delivery and stakeholder satisfaction.

Structural Engineer III

Dec 2016 – Apr 2019 | San Francisco, CA

Structural Engineer II

Jul 2014 – Dec 2016 | Spain & UK

SKILLS

Development: Go (Golang), Node.js (TypeScript, Javascript), Python, Bash, PostgreSQL, Redis, HTTP, WebSocket

Cloud & DevOps: AWS, Kubernetes, Docker, ELK (ElasticSearch, LogStash, Kibana), Git, GitHub, CI/CD (CircleCI), IaaS, CloudFormation, Terraform, Ansible, Linux, TCP/IP, TLS, Distributed Systems

EDUCATION

Certified Kubernetes Administrator (CKA)

Jul 2023

AWS Solution Architect - Associate

Apr 2023

Software Engineering & Full-stack development

Jan 2020 – Jul 2021

Launch School

BS & MS in Civil Engineering

Sep 2008 – Jul 2015

Technical University of Madrid (Spain), Delft University of Technology (The Netherlands, 2012)