

# Royer Ramirez Ruiz

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## EXPERIENCE

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### Founding Engineer

#### Browserbase

May 2024 – Current

- Spearheaded a major migration from ECS to EKS, enhancing platform security, enabling seamless scalability, and supporting a multi-regional strategy to accommodate future growth.
- Led and ensured SOC 2 Compliance for the Engineering team, paving the way for enterprise partnerships.
- Redesigned and implemented a cutting-edge networking architecture focused on scalability and security.
- Architected and deployed ArgoCD, facilitating streamlined CI/CD rollouts across all environments.
- Led the adoption of NATS (Jetstream), ensuring scalability and removing single points of failure.
- Designed and launched a comprehensive monitoring stack (Fluent-bit, Prometheus, Loki, Grafana) that delivers real-time visibility and alerts for the production environments.

### Sr. DevOps Engineer – Factory Data

#### Rivian

October 2021 – May 2024

- Designed a cloud agnostic ML platform enabling Continues Training (CT) by leveraging, ZenML, MLFlow, and Kubeflow. Currently used in production to train factory models that run on the edge.
- Lead the effort in designing and future proofing new factories with a data centric architecture.
- Defined terraform best practices and helped drive Infrastructure as Code (IaC), with cross team adoption.
- Worked across various teams within Rivian to create an internal replication solution. This replication solution consisted of replicating relational databases and event-based messages from NATs into Snowflake.
- Built a custom python program that pushes more than 2 million files out of the factory floor.
- Mentored Engineers on various topics including Kubernetes architecture, RDS replication, networking, scaling systems, and building infrastructure to support large models at scale.
- Built and deployed shared Manufacturing Kubernetes clusters using Terraform.
- Helped launch Enduro drive units by bringing cross team alignment from the technology business units.
- Lead and conducted large migrations with zero downtime for all PostgreSQL databases across the factory.

### DevOps Engineer

#### Rakuten

July 2019 – October 2021

- Built and maintained 50-60 GKE clusters in dev, stage, and prod environments.
- Ensured IaC was adopted by using custom Terraform modules that were easy to use.
- Built and maintained CI/CD tools like Spinnaker, Kubeflow, and Jenkins.
- Built multiple internal tools that helped with performing security audits on Google Cloud Platform (GCP) that monitored external IP's, firewall rules, and IAM permissions.
- Built internal API's that shutdown GKE and GCE instances based on schedules or posted requests. This helped with cost saving measures and would bring up DR environments when an outage was detected.
- Created an autoscaling feature that safely turned on/off StatefulSets like Elasticsearch running on GKE. This helped save on costs by ensuring resources were not idling.
- Implemented private Alpha and Beta offerings from GCP into Rakuten's environment. This helped ensure the environments stayed up to date with the latest in cloud computing offerings.
- Maintained and deployed monitoring tiers that consisted of Prometheus, Elasticsearch, Kibana, and Grafana.
- Designed and deployed a service mesh architecture that used Envoy and Traffic Director to all GKE clusters.

### Advanced Analytics Specialist

#### Metia

October 2018 – July 2019

- Optimized unsupervised Natural Language Processing (NLP) topic models in R and Python by reducing the compute time from several weeks to just a few hours.
- Worked in a team to build and containerize a web crawler written in Nodejs.
- Responsible for creating ad-hoc data models, and dashboards to provide insights for Microsoft executives.
- Created and maintained SQL databases, docker containers, and virtual machines to process workloads.

## EDUCATION

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B.S. in Applied Mathematics,  
Minor in Physics

University of Central Arkansas

2013 – 2017

### Mathematics Senior Electives

- Modeling & Simulation
- Numerical Methods
- Ordinary Differential Equations I, II
- Stochastic Processes

### Physics Electives:

- Classical Mechanics
- Experiments in Physics - Meteorology
- Observational Techniques – Astronomy
- University Physics I, II, III