Royer Ramirez Ruiz

EXPERIENCE

Sr. DevOps Engineer – Factory Data **Rivian** *October 2021 – Current*

- Responsible for designing a cloud agnostic ML platform enabling Continues Training (CT) by leveraging Feast, ZenML, MLFlow, and Kubeflow
- Deployed and managed a custom version of Kubeflow that is used in production to train factory models.
- Lead the effort in designing and future proofing networking for new factories, and ML workloads.
- Defined terraform best practices and helped drive Infrastructure as Code (IaC).
- 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 into Snowflake.
- Mentored Interns and Engineers on various topics including Kubernetes architecture, RDS replication, networking, scaling systems, and building infrastructure to support large models at scale.
- Built and deployed EKS clusters using Terraform and conducted a proof of concept for EKS Rover.

DevOps Engineer **Rakuten** *July 2019 – Current*

- 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.

Technical Analyst **Euronet Software Solutions** *December 2017 – October 2018*

- Assisted financial institutions with production failures and ensured banking systems stayed active.
- Assisted institutions with preventative fail overs to their DR regions in order to perform production upgrades.
- Tested and deployed custom security features for large banks.
- Conducted live migrations between production and disaster recovery environments.
- Assisted financial institutions to meet dynamic requirements set by Visa and Mastercard.

EDUCATION

B.S. in Applied Mathematics, **University of Central Arkansas** *2013 – 2017*
Minor in Physics

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, II