

Daniel Herrera

Fields of Interest

Site Reliability Engineering | Developer Tooling | Process Automation | Distributed Systems
Game Engine Design | Cyber Security | Data Science

Engineer with over 4 years of experience using software and process to do what I love:

solve problems and remove toil

I'm eager to become better at doing this by growing my skillset and experiences

Work History

Cloud Engineer @ Ultimate Software (Aug '17 - Now)

Developing an internal, cloud-agnostic Kubernetes offering from scratch

Related Tech: *OpenStack, K8s, Rancher, Terraform, Packer, Ansible*

Collaborate with architects, security specialists, and external consultants on initial system requirements and company-wide migration strategies. Deliver initial implementation using custom pre-baked cluster node images and a GitOps workflow for auditable requests. Transition towards Rancher-managed clusters to further enable self-service for consumers.

Developing new deployment tooling for a legacy, in-house deployment service

Related Tech: *OpenStack, Python, GitLab CI, Terraform, Chef*

Uncovered and recreated the deployment process for a legacy OpenStack deployment API written in Python. This new automation enabled reproducible builds and safe rollouts of changes. Along with new monitoring utilities and operational documentation, future maintainability and stability were improved.

Software Engineering Intern @ Ultimate Software (Jan '16 - Aug '17)

Maintaining Ubuntu and Windows appliances leveraged by internal deployments

Related Tech: *Chef, RSpec, TeamCity, Ruby, Sensu, Grafana*

Fully leveraged subset of Chef tooling including cookbooks, knife, RSpec Kitchen tests, and Rake to accomplish a major rewrite of previously unmanageable configuration management code with improved documentation and architecture, resulting in increased development speed and customer satisfaction.

Configure monitoring for both internal and customer-deployed appliances

Related Tech: *Ruby, Sensu, Grafana, InfluxDB*

Wrote custom Sensu plugins and metrics-based alerts that improved visibility into outages for both my team and customer products, helping make more data-driven decisions.

Education

B.S. Computer Science from Florida International University (Fall 2018)

The above covers major projects from my recent work history

I cover my experience and skills far more in-depth on my website (link below)