

Jonathan C Ploucha

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RELEVANT EXPERIENCE

SRE/Ops Engineer

Upstream Security Pittsburgh, PA (Remote - Herzliya, Israel)

August 2022 - Present

- Designed & deployed an incremental pod autoscaler across entire client base.
- Responsible for maintaining multiple iterations of infrastructure across entire client base, focused primarily in North America.
- Responsible for platform and application release management across entire client base, focused primarily in North America.
- Responsible for monitoring all clients, focusing on uptime and data stream continuity.
- Serving as primary technical contact for all North American clients.
- Assisting in establishing a support team responsible for both internal and external clients.

Director of Infrastructure

Branding Brand Pittsburgh, PA

October 2019 - August 2022

- Designed, built, and implemented new Kubernetes-based infrastructure to replace a legacy Apache Mesos-based one.
- Realized approximately \$250,000 annually in cloud hosting savings for Branding Brand by leveraging managed services and open source software.
- Upgraded, improved logging and monitoring platforms to achieve an uptime of 99.99% across mobile web retail sites.
- Implemented infrastructure-as-code paradigm using Terraform.
- Designed, built, and implemented globally load-balanced infrastructure spanning multiple cloud regions with automated failover.
- Added global caching layer with CORS options to greatly improve application response times and availability.
- Responsible for managing a 24/7/365 on-call infrastructure and security rotations utilizing PagerDuty. Acted as the primary point of contact for client communications.
- Designed cost-reduction strategies for an external client's infrastructure.
- Designed an event-driven architecture utilizing Knative.
- Oversaw all new information security and privacy policies including PCI, GDPR and CCPA compliance.
- Managing a team of up to four direct reports.

DevOps Engineer II

Branding Brand Pittsburgh, PA

March 2019 - October 2019

- Upgraded the operating system in a legacy Ubuntu-based infrastructure by two major releases on a compressed schedule for security compliance.
- Concurrently maintained three bespoke infrastructures on a 24/7/365 schedule as part of a team of two.
- Migrated to an entirely cloud-based (AWS) infrastructure from a hybrid setup.

- Introduced Istio service mesh into an external client's infrastructure, allowing for advanced deployments and microservice routing.
- Responsible for creating and implementing a PCI compliant internal network as an extension of the CDE.

Operations Engineer

Branding Brand Pittsburgh, PA

July 2017 - March 2019

- Built a GCP GKE infrastructure and CI/CD system as well as wrote CI/CD pipelines for an external client.
- Re-engineered deployment processes and infrastructure to allow for blue/green deployment.
- Created an organizational GitHub mirror in AWS CodeCommit providing codebase redundancy.
- Rebuilt Jenkins CI system from the ground up, implementing a microservice infrastructure allowing for a flexible and scalable platform utilizing AWS Elastic Container Service.
- Designed and implemented automated network and web hosting architecture for distributed applications, both through Chef architecture and ad hoc methods.
- Managed configuration and administration of Linux virtual servers and networks, particularly within AWS.
- Built a recommendation engine to suggest appropriate memory, CPU and container instance count for all applications across internal environments and AWS regions to optimize infrastructure resource allocation amongst EC2 instances.
- Handled service monitoring and alert response, scaling applications and infrastructure as needed.

Automation Developer

Branding Brand Pittsburgh, PA

November 2015 - July 2017

Analyst

Branding Brand Pittsburgh, PA

December 2014 - November 2015

Data Coordinator

University of Pittsburgh Pittsburgh, PA

November 2011 - December 2014

EDUCATION

University of Pittsburgh School of Arts and Sciences, Pittsburgh PA

Bachelor of Arts, Cum Laude, August 2010

Majors: Economics, Political Science

University of Pittsburgh School of Information Science, Pittsburgh PA

Bachelor of Science, Ongoing

Major: Information Science

APPLICABLE SKILLS

- **Cloud Environments:** AWS, Azure, GCP
- **Container Orchestration:** Mesos + Marathon, AWS ECS, AWS Fargate, AWS EKS, Kubernetes, GKE
- **Continuous Integration:** Azure DevOps Pipelines, Jenkins, Travis, GCP Cloud Build, Github Actions
- **Databases:** AWS ElastiCache, AWS RDS, MongoDB, MySQL, Postgresql, Redis
- **Events:** Apache Kafka, Knative
- **Infrastructure:** Apache Mesos, Apache Zookeeper, AWS EC2, Chef, AWS CloudFormation, Helm, Terraform, Terragrunt
- **Logging/Monitoring:** AWS CloudTrail, Datadog, Elasticsearch, Grafana, Logstash, Kibana
- **Serverless:** AWS Lambda, GCP Cloud Function, Knative