Benjamin Porter

Software Engineer – Infrastructure

Manhattan, New York

benjamin.porter@utexas.edu

979-450-5870

EXPERIENCE

Affirm   New York, NY
Senior Software Engineer   Jan. 2024 – Present

- Planned and executed key pieces of Affirm's adoption of Cloudflare, coordinating with platform/product teams and enterprise partners to smoothly run the migration. The unified platform serves all of the company's incoming traffic, 830M requests per day, and supports mutual TLS, complex routing, and request transformations.
- Implemented rate limiting for a critical merchant integration using Cloudflare. Defined processes for teams across the company to implement CDN behaviors with Terraform.
- Served as a subject matter expert embedded on other platform teams working on key initiatives. Developed a proof of concept for running ProxySQL on Kubernetes, providing insights to guide the migration at a larger scale. Deployed compute and cross-region networking for a GDPR-compliant privacy service necessary for entering the UK market.
- Resolved critical production on-call issues and triaged support requests. On-call scope included issues impacting all traffic in Affirm's network.
- Interviewed, onboarded, and mentored new early-career team members, providing project and career guidance.

Software Engineer   Mar. 2021 – Dec. 2023

- Deployed infrastructure components in new cloud regions to support Affirm's expansion into multiple geographies. Standardized workflows using Terraform for future reproducibility.
- Implemented a tiered architecture to separate critical partner traffic into an isolated load balancer. Refactored backend routing to support a ring deployment model insulating high criticality traffic.
- Improved self-service for the secrets management lifecycle, removing dependence on the platform team for creation of new encryption keys.
- Migrated several services from EC2/SaltStack to Kubernetes on EKS, giving the service owners more granular control of their infrastructure and operations.
- Standardized workflows for managing Redis clusters with Terraform. Corrected a misconfiguration resulting in a 99% RTT reduction for a cache in the critical path. Scaled caching infrastructure to meet peak season projections.

Koddi   Austin, TX
Software Development Intern   Jun. – Dec. 2020

- Implemented IP address-based bot detection and filtering in a managed Kafka platform, including automatic rollback of advertiser budgets to prevent overspend from bot traffic.
- Introduced atomic transactions to backend flows, improving database consistency.
- Scaled an end-to-end test to use 150,000 real client requests, giving a more realistic performance estimate.

WP Engine   Austin, TX
Software Engineering Intern   Jun. – Aug. 2019

- Added batch get and update capabilities to a Django billing system.
- Bootstrapped a new Go microservice to reconcile pending billing invoices in batches.

PROJECTS

AWS TUI   Jan. 2023 – Present

- Terminal UI for viewing and filtering resources in AWS services, inspired by K9s.
- Supports most major AWS services including EC2, S3, Route 53, ElastiCache, KMS, and Secrets Manager.

SKILLS

Languages: Go, Python, Java, Kotlin, C/C++, shell scripting
Tools: Terraform, Kubernetes, Docker, Redis, Cloudflare, Istio, NGINX, ProxySQL, AWS (EKS, ALB, ElastiCache, S3, KMS)

EDUCATION

The University of Texas at Austin   Austin, TX
B.S. in Computer Science   Aug. 2017 – Dec. 2020