RICHARD BONEFF-PENG

Platform Engineer who relishes discovering Goldilocks DevOps, Architecture, and Infrastructure solutions

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Clearcover: Principal Software Engineer — *Remote*   Dec 2020–Sep 2023

Technical Leadership: Trusted technical leader guiding critical infrastructure and architectural decisions
- Provided insights as key member of Platform Team that consistently led to well-vetted, practical, and cost-effective solutions with high-impact across the organization
- Actively participated in Architecture Advisory Forum and created Architecture Decision Records (ADRs)
- Collaborated closely with key engineering stakeholders to ensure the seamless launch of critical services, minimizing production issues and outages

Backstage Developer Portal: Built internal developer portal using Spotify's Backstage platform to empower engineers to access service ownership information, foster cross-team collaboration, and self-service support
- Automated Kotlin microservice bootstrapping: deployed with Infrastructure as Code (Terraform) created GitHub repositories with standardized settings
- TypeScript Google Sheets datasource plugin to reduce effort required to maintain catalog metadata

Ephemeral Environments: Developer platform for launching ad hoc microservice configurations to sandbox environments: shortened E2E testing cycles and substantially reduced production defects
- Optimized sandbox environments for efficient, cost-effective use of available Kubernetes cluster resources
- Tracked metrics to generate reports providing costs breakdowns and projections to engineering leaders
- Created and maintained guides, technical documentation, video tutorials, and support tickets to drive adoption and elevate more engineers into power users
- Integrated GitHub Actions CI/CD pipeline to automatically rebuild environments on every push
- Services deployed into Kubernetes using Helm. Kotlin REST API and Ruby CLI interface. Terraformed RDS and Secrets Manager configurations

GitHub CI/CD: Architected and built groundwork to migrate CI/CD pipelines from Jenkins to GitHub Actions
- Optimized costs and increased reliability using self-hosted runners
- Standardized CI/CD pipelines to increase observability, reliability, and reduce boilerplate. Stabilized trunk-based development trunk branches, improving Change Lead Time and Deployment Frequency by pushing E2E testing left, before releasing to lower environments
- Flexible convention over configuration architecture enabled incremental service migration to new pipeline
- Increased visibility and proactive action by surfacing issues to response teams as Slack messages
- TypeScript AWS Lambda function to export GitHub events to Datadog and Sumo Logic
- Developed custom TypeScript GitHub Actions and tested E2E workflow test automation using Act. Created Kotlin template repository as framework for building new services

Onboarding and Development Environments: Standardized and automated engineering onboarding process from an ad hoc, inconsistent "process"
- Architected to provide proactive support, automatically uploading failure logs to AWS S3 and sending Slack notifications for support triaging
- Automatically configured standard authentication to cloud infrastructure, accelerating rollout of new security practices such as AWS SSO
- Created architecture diagram and received feedback and buy-in from engineering stakeholders

- Collaborated with Security Team to ensure tools were vetted
- Integrated with Kandji MDM using shell scripts. Used Terraform Infrastructure as Code to define cloud resources

Operational Metrics Dashboard:
- Gathered DORA metrics data using signals from GitHub and JIRA
- Presented to engineering leaders using Grafana Dashboard with predefined views
- Provided empirical data to track trends and quantify the impacts of organizational changes such as, ephemeral environments, release train, and team restructuring
- Drove accountability by integrating dashboards into Backstage as a single pane of glass used during Operational Reviews
- Evaluated and trialed existing SaaS products for cost-effectiveness relative to building an in-house solution

Consumer Channels: Clearcover's direct-to-customer auto insurance website
- Rails API backed by Postgres/RDS with React frontend
- Mentored teammates to promote solid architectural patterns, pragmatic agile practices, up-to-date documentation, thoughtful code reviews, and solid test coverage

Alfa Jango: Web Developer — *Ann Arbor, MI* Jul 2014–Dec 2020

Genomenon Mastermind: Comprehensive platform to identify and analyze genetic evidence found in millions of scientific articles to help cure rare diseases
- Collaborated with Chief Science Officer to develop groundbreaking, interactive D3 genomic data visualizations and AngularJS search and curation interface. Improve genomic curation efficiency and breadth by several orders of magnitude, enabled geneticists to rapidly diagnose rare diseases
- Architected and built foundational Rails application backend and Go Elasticsearch proxy microservice
- Designed and optimized Elasticsearch NoSQL schemas for flexible, yet performant queries. Built data ingestion and indexing pipeline. Managed cluster of search nodes with Puppet
- Helped CTO scale the engineering team with interviewing, hiring, onboarding, and mentoring new engineers

Canopy Channels: Allows artists to connect with fans and support charities with exclusive subscription content
- Acted as CTO helping guide project roadmap, hire and onboard developers, establish code quality standards and review processes, and provide startup business mentorship
- Architected and built cross-platform mobile and web app using Expo Web and React Native, powered by an Apollo GraphQL Ruby on Rails API. Stripe integration for subscription payments

letzgo: Promote local businesses with special deals and offers
- As Founding Engineer, provided startup guidance and business mentorship to business owner. Assisted with market research, advertising, and incorporating feedback from real user testing
- Built native cross-platform mobile app using Expo and React Native powered by Ruby on Rails GraphQL API

Mi Padrino: Easy event planning for the hispanic community
- Developed Dockerized Python Flask application deployed to AWS EC2, integrated with Sendinblue automated email campaigns
- Acted as CTO, mentoring junior founding engineer with guidance on testing, documentation, and code quality standards

Michigan Memories: Michigan Digital Library Portal: Aggregates and highlights digital library assets from Michigan libraries — Rails application with Dockerized Solr instance with custom metadata processors written in Java to annotate records with geolocation data and sanitize dates

Give and Take: Helps organizations build internal communities of trust by fostering productive generosity and information sharing — Architected command-line CloudFormation deployment pipelines to deploy app to AWS using Infrastructure as Code

Wayne RESA: Web Developer — *Wayne, MI* Aug 2012–Jul 2014

MI Streamnet: Mobile-friendly live-streaming and on-demand education video content for Michigan educators — Rails app with search powered by Elasticsearch, Sidekiq, and ffmpeg. Managed VMware web hosting servers

Mays & Associates: Web Developer — *Columbia, MD* Dec 2010–Aug 2012

Developed auction-based fundraising platform for a startup, developed WordPress sites, managed IT infrastructure: Linux and Windows servers, DNS, email, MySQL databases

Education: University of Virginia — *Charlottesville, VA* 2004–2008

Bachelor of Arts, Psychology