

SUMMARY I build tools and infrastructure for developers, security practitioners, and cloud operators. I do my best work alongside a team that learns from each other, and is excited about their projects. My background in operations and decade+ of experience makes me uniquely focused on writing observable, reliable software and automating ops tasks. I love puns, and would appreciate hearing *your* favorite pun.

SKILLS

Certifications AWS Solutions Architect Pro & Associate
Languages Python, TypeScript, Rust, Go, Bash
Tools CDK, CloudFormation, SAM, Ansible, Serverless Framework, Pulumi, \LaTeX

EXPERIENCE **Crunchyroll** – Remote 2023 – Present
Principal Engineer <https://crunchyroll.com/>
Engineering Enablement team lead, with scope to work across the Product & Engineering organization on developer experience, platform, and process problems. Took over incident review and operations review processes and drove improvements in site reliability. Led internal trainings on infrastructure, serverless, and database practices. Contributed to new interview and onboarding processes to more efficiently grow engineering teams.

Stedi – Remote 2022 – 2023
Serverless Software Engineer <https://stedi.com/>
Enabled pay-per-use billing for Stedi services and reduced API latency by re-architecting billing to remove billing calls from customer request paths. Designed fraud prevention and entitlement checking tools to prevent malicious usage of Stedi resources. Built telemetry and billing Lambda Extensions in Rust. Used AWS CDK, TypeScript, and Github Actions to maintain Kinesis streams, Athena/Glue tables, and Lambda functions supporting BI and billing.

Vendia – Remote 2020 – 2022
Principal Engineer <https://vendia.com/>
Architected AWS management tools to isolate workloads per-customer in thousands of AWS accounts, following Vendia's STAMTI SaaS tenancy model. Designed and implemented application features, data storage, and control-plane tools. Led infrastructure projects to maintain security boundaries and enable product observability. Built a canary-driven deployment service to enable continuous delivery and reduce lead time. Implemented GraphQL schema generation and parsing tools in Python. Partnered with SA team for post-sales implementation.

Trek10, Inc. – Remote 2018 – 2020
Lead Architect, Team Support <https://trek10.com/>
Led mixed client/Trek10 engineering teams on 4+ projects at a time for cloud migrations, application refactors, and security projects. Served as the lead architect and technical contact for client engagements from pre-sales through delivery. Public work included blog posts, webinars, and conference talks to drive inbound sales.

Red Hat, Inc. – Remote 2014 – 2018
Principal Software Engineer, Ansible <https://redhat.com/>
Built Ansible Core/Engine and AWS-related features upstream to the Ansible project. Created automated qa-scale-lab testing environment for testing Ansible against thousands of targets built on AWS ECS. Lead engineering partner for AWS and Google Cloud Platform. Prior to Ansible acquisition, submitted features and fixes upstream to the OpenStack Heat (Orchestration) project and downstream to RDO/RHOS.

Hudl – Remote/Lincoln, NE 2013 – 2014
DevOps Engineer <https://hudl.com/>
Created Python metrics/analytics applications and used Chef to manage infrastructure behind a high-scale video delivery application. Improved AWS infrastructure security posture and created incident response procedures.

Google – Pittsburgh, PA June – August 2012
Software Engineering Intern <https://google.com/>
Wrote infrastructure management software in Python and C++. The project saved time and money by managing requests for maintenance-related downtime without impacting availability.

Newstex, LLC – Remote 2011 – 2012
Cloud Engineering Intern <https://newstex.com/>
Developed WSGI applications to deliver news stories to customers using EC2, S3, SQS, and SimpleDB.

EDUCATION **Rochester Institute of Technology** – Rochester, NY 2009 – 2013
B.S. Applied Networking and Systems Administration
Minors Software Engineering, Applied Communications

OPEN
SOURCE

AWS Role Speed Demon - Author

<https://github.com/ryansb/arsd/>

A desktop app to manage sessions and roles for one or more AWS IAM Identity Center domains. Built in Rust, the app surfaces frequently used accounts, caches available accounts and roles, and opens isolated browser sessions to simplify multi-account operations.

PynamoDB Polymorph - Author

<https://github.com/ryansb/pynamodb-polymorph/>

PynamoDB-Polymorph is an extension for PynamoDB to support single-table design in DynamoDB. To enable patterns from The DynamoDB Book, PynamoDB-Polymorph adds compound keys, compressed attributes, and counted set sizes.

Serverless Framework - Contributor

<https://github.com/serverless/serverless/>

Contributed to early development of Serverless Framework, including Python support added in 0.x versions and support for function versioning to enable rollbacks after deploy.

Ansible-Container - Contributor

<https://github.com/ansible/ansible-container/>

Ansible Container is a Python tool to build Docker images using Ansible playbooks, replacing shell scripts and Dockerfiles. It makes migrating to containers easier and less error-prone by allowing reuse of existing Ansible playbooks roles. To do this, Ansible Container acts as a shim during the container build process to run each role and save the result as a layer.

PUBLICATION

Seamlessly caching MongoDB Atlas

Momento Blog

Creating Order in Unordered Data Stores - DynamoDB

Trek10 Blog

Intro to AppSync Video Course

A Cloud Guru

GraphQL Applications with the Serverless Framework

A Cloud Guru

AWS Lambda Video Course

A Cloud Guru

Serverless Software

Talk Python to Me Podcast

FaaS and the Benefits of Serverless

HeavyBit Podcast

Harmonizing Serverless and Traditional Applications

ServerlessConf Austin

Cloud Management with Ansible

AnsibleFest San Francisco

Hybrid Orchestration: Cloud Services and Ansible

Red Hat Summit 2018

Ansible for Serverless Orchestration

AnsibleFest New York

Hybrid Infrastructures with Google Cloud Platform and Ansible

Red Hat Summit 2017

Open Source Culture and Serverless Applications

ServerlessConf Brooklyn

Beginner and Intermediate Python

Inclusive Tech Buffalo