

# Nick Sunday

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## Summary

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Senior Platform and Infrastructure Engineer with over 12 years of experience building automation, observability systems, and internal tooling for distributed environments. Focused on reducing operational overhead, improving system reliability, and enabling engineers through well-designed platforms and workflows. Experienced in Python, Kubernetes, and cloud-native technologies, with additional background in machine learning systems through ongoing graduate study.

## Skills

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**Languages:** Python, Go, Kotlin, Java, SQL, Bash

**Infrastructure & Cloud:** Kubernetes, Terraform, GCP, AWS, Docker, Helm, Ansible

**CI/CD & Observability:** Jenkins, Google Cloud Build, Spinnaker, Prometheus, Grafana, BigPanda

**Systems & Data:** PostgreSQL, Cassandra, MySQL, Firestore, gRPC, Protobuf, REST

## Experience

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**Senior Site Reliability Engineer, Digital Realty – Remote** Jun 2022 – Present

- Built Python CLI tooling to interface with internal gRPC/protobuf network APIs, replacing manual Jenkins and Ansible workflows and enabling programmatic resource management
- Operate and automate network infrastructure across 36 data centers, supporting multi-rack deployments of Arista EOS switches and Netgate firewalls for a software-defined platform
- Designed and implemented a nightly backup validation pipeline using Docker and database snapshots for etcd and SQL data, improving confidence in disaster recovery
- Deployed Prometheus exporters on NVIDIA BlueField DPUs to extend observability into virtualized networking infrastructure
- Streamlined environment provisioning and deployment workflows using Jenkins and Ansible, reducing manual configuration overhead
- Mentored engineers and contributed to improved practices in automation, testing, and infrastructure reliability

**Senior Site Reliability Engineer, Kohl's – Remote** Apr 2021 – Jun 2022

- Led development of a Python-based automation system for Wi-Fi triage across hundreds of retail stores, resolving the majority of incidents through automated remediation and reducing manual intervention
- Built data pipelines to ingest network device metrics from Cisco DNA Center and VeloCloud APIs into BigQuery, enabling automated alerting and incident creation via BigPanda and ServiceNow
- Designed remediation workflows that automatically triggered corrective actions and escalated failures, improving reliability and reducing time to resolution for store connectivity issues
- Automated edge device software upgrades using Ansible, reducing deployment time and minimizing human error across distributed network infrastructure
- Replaced legacy shell scripts with Python CLI tooling, improving usability, logging, and long-term maintainability of internal automation
- Mentored a junior engineer and contributed to establishing Python development standards across the SRE organization

**DevOps Engineer II, Rackspace Technology – San Antonio, TX** Apr 2019 – Apr 2021

- Operated and maintained a high-scale Cassandra cluster storing time series data for Rackspace cloud customers, handling large-volume ingestion and query workloads
- Designed and implemented CI/CD pipelines and deployment workflows on GKE using Helm, Docker, and Google Cloud Build in a largely greenfield environment
- Contributed to Google Cloud Builders by upgrading the Helm builder for Helm v3 compatibility and merging changes upstream
- Developed internal tooling and automation to improve deployment consistency and reduce manual effort

- Collaborated with globally distributed engineering teams to deliver platform changes and support production systems in an on-call rotation

**DevOps Engineer I/II**, Rackspace Technology – San Antonio, TX

Apr 2015 – Apr 2019

- Built and maintained a VM provisioning and deployment platform using vRealize, Ansible, and AWX, supporting internal services and tooling across a VMware-based private cloud
- Led migration from Sensu to Prometheus with custom metrics and alerting, improving observability and enabling better insight into application and infrastructure performance
- Designed and deployed HA infrastructure components including Vault and Consul, enabling secure secret management and dynamic service discovery for automation workflows
- Automated infrastructure provisioning and configuration for DNS, secrets, and service discovery, reducing manual setup and improving system consistency
- Enabled reliable release workflows with fast rollback and roll-forward capabilities, improving deployment safety for internal platform services
- Supported SOX and PCI compliance efforts by generating audit artifacts and hardening infrastructure and automation practices

**Linux Administrator**, Rackspace Technology – San Antonio, TX

Aug 2013 – Apr 2015

- Supported Linux hosting customers in an unmanaged cloud environment, troubleshooting system and infrastructure issues across ticket, chat, and phone channels
- Acted as an escalation point for Citrix Xen hypervisor and infrastructure-level issues, resolving complex virtualization problems
- Trained and mentored new administrators, improving onboarding and team effectiveness

## Projects

**Deepfake Music Detector**

[arXiv:2505.09633v1](https://arxiv.org/abs/2505.09633v1) · [github.com/nicksunday/deepfake-music-detector](https://github.com/nicksunday/deepfake-music-detector)

- Built and trained a CNN-based model using PyTorch to classify AI-generated music from mel-spectrogram inputs
- Developed preprocessing pipeline using Librosa and evaluated model performance using cross-validation
- Published results on arXiv

**Board Game Rules Retriever**

[github.com/nicksunday/rules-retriever](https://github.com/nicksunday/rules-retriever)

- Built a retrieval-augmented system using LangChain, FAISS, and sentence embeddings to answer rulebook queries
- Parsed and indexed PDF documents into semantic chunks and exposed a FastAPI + Streamlit interface
- Containerized the application for reproducible deployment

**Board Game Suggester**

<https://suggest.games> · [github.com/nicksunday/boardgame-selector-container](https://github.com/nicksunday/boardgame-selector-container)

- Deployed a containerized Flask application to Google Cloud Run with automated CI/CD using Docker and Cloud Build
- Built backend service to query and filter board game datasets based on user constraints

**Board Game Assistant (Android App)**

[github.com/nicksunday/board-game-assistant](https://github.com/nicksunday/board-game-assistant)

- Built a Kotlin-based Android app with Firebase backend and external API integration to track game libraries and user activity

## Education

**University of Texas at Austin** – MS in Computer Science

In Progress (3.5 GPA)

**Western Governors University** – BS in Computer Science

2020