

AADITYA M NAIR

aadityanair6494@gmail.com — amnair.dev — github.com/AadityaNair

Senior Production Engineer with 6+ years building and operating infrastructure at hyperscale. Specialises in fleet configuration management, reliability engineering, incident management, and security-hardened infrastructure.

EXPERIENCE

Meta Inc.

Aug 2022 - Present

Senior Production Engineer

London, UK

- Own the server configuration layer of Meta's container platform (**Tupperware**) and serve as the **primary fleet expert** for partner teams across the org.
 - Responsible for ensuring **10M+ physical servers** are always correctly and consistently configured across the fleet, owning the full configuration lifecycle from policy definition to rollout.
 - Deep familiarity with Host Agent, the job-specific configuration data-plane, managing around 10 different configuration verticals, covering both client and server sides and how it interacts with the broader fleet platform.
 - Leveraged deep platform knowledge to partner with service owners across the org, migrating workloads onto the container platform and directly contributing to **\$100M+ in infrastructure operations cost savings**.
 - Part of the **Incident Management rotation** and escalation path for hard-to-diagnose fleet issues, spanning fleet software failures through to hardware problems.
 - Debug and resolve complex host-level issues across the fleet — spanning **kernel, storage, networking, and host software** — serving as an escalation point for problems that cut across team boundaries.
 - Currently driving provisioning speed improvements, targeting **50% reduction in time-to-ready**.
- Serve as the internal SME for Meta's **Chef** platform — the generic configuration platform that runs reliably across **10M+ servers every 15 minutes**.
 - Deep expertise across the full stack — client and server configuration, cookbook development, and pipeline architecture.
 - Delivered multiple improvements to the **performance, reliability, DR readiness, and security** of the Chef infrastructure serving **10M+ hosts**.
 - Authored Chef-focused runbooks and training materials adopted as the standard onboarding reference across the team.
- Lead the introduction of **new hardware and software environments** into the fleet.
 - Onboarded new hardware types and environments including **CentOS 10, cloud-based machines, CXL Memory, and ARM servers**.
 - Debugged and resolved complex infrastructure issues across **disk, network, routing, and firewall** layers throughout onboarding, navigating the unique challenges of integrating **cloud and on-prem infrastructure at scale**
- Execute annual **SOX and PCI compliance** obligations for fleet infrastructure.
 - Led evidence gathering and liaison with audit teams across annual compliance cycles.
 - Refined existing compliance processes to streamline evidence gathering, reducing time and overhead year-on-year.
- Interviewed and evaluated candidates for production engineering roles; onboarded new hires through hands-on mentoring.

Tower Research Capital
Software Engineer - III (Information Security)

Jul 2019 - Jun 2022
Gurugram, IN

- Engineered and maintained **core security infrastructure platforms**:
 - **Cerebro**: A **high-throughput SIEM platform** and correlation engine based on the ELK stack and redis for caching and low latency log processing.
 - **Hashicorp Vault**: Firm's **sole secrets platform**; onboarded **60% of teams** and all of **PKI Infrastructure**.
 - **Cypher**: OAuth2 like service managing ACLs for **all internal services**.
- Drove **security posture improvements** across the firm in all layers of the stack.
 - Implemented compliant shell command tracking and service account usage across all servers.
 - Introduced **network restrictions and traffic monitoring** to prevent Intellectual Property theft.
 - Rolled out **HIBP monitoring, Yubikey deployment, and centralised password management** (via Bitwarden) across the company.
 - Led the enablement of **Slack EKM**, ensuring Tower retained the keys for all internal messaging.
- Partnered with **legal and compliance teams** to enable new platforms.
 - Helped develop **security expectations and a security-based tiering system** for crypto exchanges.
 - Developed similar security requirements for onboarding other third party vendors.
 - Supported **infrastructure audit obligations** (like SOC2) and related evidence collection.
- Led **company wide WFH enablement** during start of Covid.
 - Enabled **enterprise management** and deployed **macBooks and iPhones** to employees.
 - Served as SME for all things **enterprise Apple** within the company.
 - Led the buildout and testing of **AWS Workspaces** as an alternative cloud based solution.
- Interviewed candidates for the team. Also helped train junior SOC Analysts as the team grew.

Facebook Inc.
Production Engineering Intern

June 2017 – Sept 2017
London, UK

- Redesigned Hypershell's (*run ssh commands on a grand scale*) storage backend to HDFS and built a unified storage API, achieving **more than 90%** improvement in read/aggregate performance.

IIIT-Hyderabad
System Administrator (part-time)

Sept 2016 – May 2019
Hyderabad, IN

- Managed multiple services including the **internet proxy, LDAP, DNS and VMs**. These products served **~3000 people** at any time.

SKILLS

Languages: Python, Ruby, Bash, Rust, C++

Infrastructure: Docker, Chef, HashiCorp Vault, ELK Stack

Systems: Linux Internals, Networking (TCP/IP, BGP), Distributed Systems, IAM

Cloud: AWS (EC2, VPC, Workspaces), Hybrid Cloud Architecture

Others: Reliability Engineering, Incident Management, Security

EDUCATION

IIIT-Hyderabad
B.Tech + MS (By Research) in Computer Science

2013 – 2020

Thesis on [Erasure Coding for Distributed Storage](#); research papers on [Google Scholar](#)
Research Assistant at the [Signal Processing and Communications](#) lab.
Earned [Runner-Up Best Paper](#) award at [NCC 2019](#)