Yadunandan Ramanna

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Software engineer with 6+ years of experience building backend services and automating cloud infrastructure. Proficient in Python, Golang, and Kubernetes with hands-on experience designing scalable systems and mentoring engineering teams. Open to full-time software engineering roles.

EDUCATION

University of Utah **2024-2026**
M.S in Computer Science, 4.0 GPA Salt Lake City, Utah
Courses: Data Structures and Algorithms, Distributed Systems, Operating Systems, Machine Learning, Deep Learning
Sir M Visvesvaraya Institute of Technology **2014-2018**
B.E in Information Science & Engineering Bangalore, India

EXPERIENCE

VMware **2018-2024**

Senior Technical Support Engineer, *Virtual Cloud Networking*

Architected a distributed log-tracing tool using **Python** and **Golang** with a team of 5 engineers, identifying VMware hypervisor network issues and cutting incident response time by 40%.

- Mentored and upskilled a team of 5+ engineers over a 3-year period, facilitating their professional growth, removing blockers, and delivering 10+ backend automation projects with high production impact.
- Orchestrated **Kubernetes** infrastructure setup for VMware xLabs SAAS **Cloud**, including pod management, network configurations, disk mounting, access roles and IAM policies, contributing to the delivery of Project Trinidad.
- Developed automated VM deployment pipelines using **Python**, standardizing rollout and cutting deployment time by 35% while reducing manual errors.
- Embedded latency optimization in **NSX-T** and **ESXi**, reducing workload execution time by 20% and boosting stakeholder satisfaction by 15%.
- Debugged and patched over 20 high-impact networking bugs in vSphere 7.0, improving system stability and driving a 10% increase in product adoption.
- Engineered an auto-triage bot using **Python** and **Shell Scripting** for network packet inspection in VMware hypervisors, raising same-day incident resolution rates by 30%.
- Built and maintained software systems for **VMware Cloud Foundation** and SDDC, integrating new features and automating observability to reduce operational overhead by 25% and accelerating incident analysis.

SKILLS AND CERTIFICATIONS

Languages & Scripting: Python, Golang, C++, Rust, Shell
DevOps & Cloud: Docker, Kubernetes, AWS, Jenkins, Terraform, Git, Linux
Networking: TCP/IP, Routing, Firewalls, VPNs, VMware vSphere/NSX, REST APIs
Tools & Databases: PostgreSQL, MySQL, PyTorch, TensorFlow, Scikit-learn
Certifications: VMware VCIX, Certified Kubernetes Administrator, Cisco CCNA and CCNP, DSA in Python

PROJECTS

- **Operating Systems**: Constructed core OS components (custom shell, ELF loader, paging, context switching) in **C++**, enabling multitasking and memory management in a functional mini operating system.
- **Machine Learning**: Implemented and evaluated multiple ML models (neural networks, SVMs, linear regression, ensemble methods); boosted classification accuracy by up to 15% through strategic model selection and parameter tuning.
- **Fault-Tolerant Key-Value Store**: Developed a fault-tolerant distributed key-value store using **Golang**, **Raft**, and **REST APIs**, supporting high availability and consistency across nodes under simulated failure conditions.
- **SmartNIC Optimization**: Benchmarked and optimized Datapath Accelerator on **NVIDIA BF3 SmartNICs** with Prof. Ryan Stutsman; enhanced latency, throughput, and memory efficiency through hardware-software co-design.