NIRANJAN MADHAVAN D

niranjan.madhavan.d@gmail.com • +91 8056060798 • LinkedIn:Niranjan Madhavan D • GitHub:immadhavv

EXPERIENCE

Site Reliability Engineer II - Cisco

Bangalore, India

Infoblox DNS Integration-

Feb '22-present

- Spearheaded the modernization of a two-decade-old IP Address Management (IPAM) solution by migrating it to the cutting-edge Infoblox (TPS) platform boosting system security, accountability, and maintenance.
- Designed and deployed an efficient event-driven DNS backend system, leveraging local caching to process the DNS events.
- Bridged the data gaps during the migration of over 3.5 million records ensuring data synchronization.
- Automated the incident resolution process for a pattern, resulting in 80% reduction in Mean Time to Resolve (MTTR).
- Resolved a root-cause authorization problem, leading to a 50% reduction in incidents.
- Implemented traffic monitoring and alerting system via Splunk Dashboards resulting in proactive issue detection and resolution.
- Devised and implemented Runbooks to efficiently delegate incidents to other teams, streamlining the incident management process.
- Learned: Python, UNIX, Perl, DNS, Logging, SQL, Splunk, CI/CD, Code Reviews.

Metrics, Visualization and KPIs-

Aug '21-Jan '22

- Developed visually compelling KPI dashboards aligned with business requirements empowering users with data-driven decision-making using real-time insights and actionable information.
- Initiated and drove end-to-end data pipeline, culminating in dynamic dashboards that enabled high-level monitoring of a critical initiative to reduce network ACLs.
- Learned: Grafana, Kafka, Observability, Data Storytelling.

Automation Powerhouse (Intern)-

Feb '21-Jun '21

- Revamped the front-end of a centralized vulnerability management system to expedite issue resolution and establish transparent Service Level Agreements (SLAs).
- Learned: Angular, MEAN stack, Test driven development.

Research Assistant - MIT

Manipal, India

Software Defined Networks (SDN) -Security

Jan '20- Jul '21

- Implemented a Statistical Intrusion Detection Algorithm to effectively detect anomalous network traffic, especially DDoS attacks.
- Introduced the algorithm using DPDK enabled Open vSwitch connected to the SDN controller.
- Learned: Networks, Docker, Statistical analysis.

Intern - Mobius Knowledge Services

Chennai, India

May '19-Jul '19

- Machine Learning Division Accelerated lead generation process by implementing an end-to-end machine learning pipeline to automatically generate leads from webpage inputs, resulting in a 60% increase in efficiency over previous manual methods.
 - Learned: Neural Networks, Image Processing, Natural Language Processing

Intern - IIIT Internet of Things Kanchipuram, India

Dec '18

Formulated a cheap and efficient Water Quality Monitoring System using Arduino and sensors.

SKILLS & INTERESTS

- **Programming Languages:** Python, SQL, C/C++, Perl, Java, JavaScript.
- Technologies/Tools: Docker, Kubernetes, Angular, Splunk, CI/CD, Ansible, Grafana, Postman, Git, Linux, DPDK.
- Core skills: Network Automation, Observability, Front-end development, Machine Learning, Neural Networks.
- **Soft skills:** Googling, Inquisitive, Collaborative, Persistent, Fresh Perspective.

PROFESSIONAL TRAINING

Cisco, Coursera, Udemy

- Cisco Certified Devnet Associate
- Data Storytelling for Business
- DeepLearning.AI TensorFlow Developer Specialization
- Big Data Specialization

AWARDS AND RECOGNITION

Received Amaze 2 award for 'Driving the highest level of achievement' in recognition of my contribution to the successful Infoblox migration project.

EDUCATION

Manipal Institute of Technology, MAHE

Manipal, India

Bachelor of Technology in Computer and Communication Engineering. CGPA-8.5

Aug '21

Coursework: Data Structures and Algorithms, Networks, Database Management, OS, OOP, Big Data, Cyber Security.

LEADERSHIP & ACTIVITIES

- Core Committee Member: Research Head, Cryptonite, MIT.
- Management Committee Member: Acumen, TechTatva, the National Technical Festival of MIT.