

# Hemanth Rao Karade Nagendra

Email : [hraokn@gmail.com](mailto:hraokn@gmail.com)

Linkedin: <https://www.linkedin.com/in/hemanthraokn/>

Mobile : 303-999-9866

Website: <https://raohemanth.github.io/>

Github: <https://github.com/raohemanth>

## EDUCATION

---

- **University of Colorado** Boulder, USA  
*Master of Science, Computer Science; GPA: 4.0/4.0* Aug 2022 - May 2024
- **R.V College of Engineering** Bangalore, IND  
*Bachelor of Computer Science and Engineering; GPA: 8.49/10* Aug 2014 - May 2018

## SKILLS SUMMARY

---

- **Programming Languages:** Python, Golang, JavaScript, Typescript, Java, Perl, C, C++, PHP, Bash, HTML5, CSS3
- **Frameworks:** Node.js, Express.js, Flask, Django, React.js, GraphQL, Spring, RabbitMQ, Kafka, Pandas, Numpy, Perl Moose
- **Software & Tools:** Docker, Kubernetes, Helm, Terraform, Nginx, Jenkins, Salesforce CRM, AWS, GCP, Azure, Linode, Sequelize, Ssqlalchemy, Swagger, SAML, OAuth, SSO, GIT, Perforce, Grafana, Ansible, Firewalls, Tenable, Infoblox NIOS & Netmri
- **Databases:** MySQL, PostgreSQL, MongoDB, Redis

## WORK EXPERIENCE

---

- **Akamai Technologies** May 2024 - Present  
*Senior Software Engineer*
  - **Enterprise Application Access: Leading design and development of a key component of Zero Trust Network Access (ZTNA) solution.** Architecting scalable systems, implementing advanced security features, enhancing stability, and creating a flexible framework for **enterprise private application access control** based on identity and context
  - **Spearheading the development of firewall controller** designed to regulate inbound and outbound traffic through the Linode - Akamai cloud platform
  - **Designing and developing policy engine as an authorization service** to Akamai cloud and other security products
- **Arista Networks** May 2023 - Aug 2023  
*Software Engineer Intern*
  - **OpenBMC:** Worked on enhancements on the linux distribution for management controllers used in devices such as servers and top of rack switches, also streamlined the software deployment and delivery process
  - Contributed to enhancing CI & CD processes to seamlessly integrate openBmc into Arista's development workflow
- **Akamai Technologies** Oct 2021 - Aug 2022  
*Senior Software Engineer*
  - **The Bulwark - Network Security Project: Spearheaded the end-to-end development** of an extremely scalable full-stack application for Akamai's corporate network, **single-handedly designing and developing it.** The application streamlines firewall policy implementation across **150+ locations**, managing request flow, automating approvals, implementing firewall policies, and providing visual dashboards in a **distributed environment**. This effort results in saving **≈15,000+ hours of manual work annually** for the network operations team
  - **Salesforce sandbox post-refresh framework:** Designed and developed a framework in python to automate sandbox post-refresh activities for **≈600 sandboxes annually** and reduced sandbox refresh time **from 3-4 days to under 6 hours**

*Software Engineer II* Oct 2019 - Sep 2021

  - **Falcon:** Architected and developed a **scalable full-stack application** and deployed in a distributed environment. This centralized user interface benefits cross-organizational QA teams, streamlining web-based automation, API, and database testing without the need for manual script writing. This optimization results in **annual time savings of ≈5,000 hours**
  - **Patching tool:** Designed and implemented a robust solution for **identifying, managing, and patching vulnerabilities** across a network of 10,000+ virtual machines. The system's scalable architecture seamlessly accommodates various device types, contributing to **annual savings of ≈5,000 hours in manual patching** for the IT Operations team

*Software Engineer I* Jul 2018 - Sep 2019

  - **Citadel:** Engineered a Perl-based framework for Salesforce metadata deployment, optimizing the process by fetching metadata from lower environments and expediting deployment to higher stages. Significantly **reduced deployment time from 3 days to under 15 minutes**, enhancing overall efficiency
  - **VM Build Automation:** Automated UNIX virtual machine build and provisioning workflow, seamlessly integrating with Salesforce, Infoblox NIOS, and VMware Vsphere. Achieved an **annual time savings of ≈300 hours**
  - Developed scripts and ansible playbooks to **automate manual tasks** performed by system, network, and IT operations team.

*Software Engineer Intern* Jan 2018 - Apr 2018

  - **HostDB Tool:** Designed and developed a LAMP Stack application to efficiently retrieve details of ≈10,000 servers, process data, and present results in the desired format. **Realized annual time savings of ≈500 man-hours**