Nishchal Shetty

+1(720) 472-4420 | Nishchal.Shetty@colorado.edu | https://www.linkedin.com/in/nishchalshetty/

EDUCATION

University of Colorado - Boulder | Master of Science in Computer Science | GPA - 3.7/4.0 ***Aug 2024 - May 2026***

RV College Of Engineering, India| B.E in Computer Science and Engineering | GPA - 8.97/10 ***Aug 2017 - Aug 2021***

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, Javascript, HTML, CSS

Frameworks: FastApi, React.js, Node.js, graphQL

Tools: Git, Docker, Kubernetes, Amazon Web Services (EC2, RDS, S3, ECS, EKS, ELB), RabbitMQ, Kafka, Elasticsearch, Hadoop, Hive, Helm, Grafana, GitHub Actions

Database: Postgres, MySQL, MongoDB, Redis

COURSEWORK

Data Mining, Advanced Algorithms, Computer Networks, Operating Systems, Compiler Design, Data Structures, Database Management Systems, Artificial Intelligence, Big Data Analytics, Datacenter Scale Computing, Cybersecurity

INDUSTRY EXPERIENCE

Cloud Developer, Hewlett Packard Enterprise | Bangalore, India ***Sep 2021 - June 2024***

- Collaborated on the development and enhancement of key features for **HPE GreenLake Compute Ops Management**, a cloud-native management console, including firmware compliance, OS installation, and firmware downgrade, leveraging **python**, **REST APIs**, and **PostgreSQL** to improve **system performance**, **operational reliability**, and **cross-generation compatibility**.
- Deployed, and managed **microservices** on **AWS EC2** across **multiple regions**, ensuring high availability, scalability, and fault tolerance for critical cloud services in HPE GreenLake Compute Ops Management. Utilized **load balancers** and **auto-scaling** to optimize performance and resource utilization.
- Developed a **log parsing service** for Compute Ops Management, which was used to parse encoded log files from HPE servers, enabling **efficient error debugging** and system log review for customers and service teams, reducing debugging time by **25%**.
- Engineered comprehensive **unit** and **component tests** for all services, increasing **code reliability** by **30%** and preventing integration issues across the system.
- Designed and deployed **Humio dashboards** for monitoring services in HPE GreenLake Compute Ops Management, enhancing **system visibility** and increasing **operational efficiency** by **20%**.
- Created **python scripts** for data storage from HPE Infosight and built an application to monitor the functionality of other Infosight applications, improving **system monitoring** by **25%** and ensuring early detection of potential failures.
- Worked within an **agile sprint team** to identify and complete tasks ahead of deadlines, delivered product demos during release cycles, and resolved critical bugs, improving product stability.

Software Engineering Intern, Hewlett Packard Enterprise | Bangalore, India ***Jan 2021 - June 2021***

- Leveraged **Ansible playbooks** to automate the provisioning of virtual machines, reducing deployment time, and ensuring consistent infrastructure setup.
- Developed solutions to **automate** the deployment of software to virtualization platforms like **ESXi** and **Hyper-V**, streamlining the installation process for iLO Amplifier Pack, an at-scale inventory and update management tool for HPE servers.
- Created **technical documentation** for automated deployment processes, providing a reference for future development and operational teams.

PROJECTS

Graduate Student | University of Colorado, Boulder ***Aug 2024 - Dec 2024***

Wildfire Prediction System

- Developed a wildfire risk prediction system using **NASA FIRMS** and **OpenMeteo** datasets, integrating advanced machine learning techniques to achieve an **80.33%** accuracy post-optimization with **XGBoost**.
- Engineered robust feature pipelines by consolidating multi-source data, addressing inconsistencies, and implementing **spatial-temporal analysis** for enhanced prediction accuracy.
- Conducted **exploratory data analysis** to identify key wildfire predictors, including soil temperature, relative humidity, and wind speed, leading to a **0.72%** improvement in **F1-score**.

Software Engineering Intern | GE Healthcare ***Mar 2020 - July 2020***

E-Auction site for used equipment

- Developed an E-Auction platform using **React**, **Node.js**, and **AWS** to streamline the company's product resale process, enhancing operational efficiency and user experience.
- Integrated **Redis** for caching frequently accessed auction data, reducing database queries and improving response times, ensuring a **seamless user experience** during high-traffic periods.
- Deployed the platform on **AWS ECS**, leveraging containerized microservices for **scalability** and **fault tolerance**, while utilizing **S3** for secure and efficient image storage of auction items.