



Sharmisha Parvathaneni

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EDUCATION

Master of Science (MS) in Computer Science
University of Illinois at Chicago, Illinois

August 2022 - May 2024

SKILLS

Languages	Python, JavaScript, C, Node.js, ReactJS, SQL, Bash
Cloud/Database	AWS, Oracle Cloud, Azure, MySQL, PostgreSQL, MongoDB, Docker, Kubernetes
Software/Tools	Ansible, Terraform, Github, Gitlab, CI/CD, JIRA, Nginx, Apache web server, Selenium, Jenkins, Scrum, Tableau, IaC, VMWare, Linux
Other	SSH, SSL, HTTP/HTTPS, TCP/IP, NumPy, Pandas, ExpressJS, REST, Django, Flask, ORM

WORK EXPERIENCE

Full Stack Engineer, M3L Lab, UIC

- Designed the DMREF tool in ReactJS to effectively visualize and analyze phase diagrams and crystal planes.
- Designed a SQL server database and optimized indexes, resulting in a 300% improvement in the speed of retrieving complex crystal structure data from the database and enhanced overall query efficiency.
- Containerized applications with Docker, reducing deployment time by 30% and increasing developer efficiency.

Assistant System Engineer, Tata Consultancy Services

Aug 2021 - Aug 2022

- Developed user authentication (OAuth 2.0-based Single Sign-On (SSO) system) micro-service for a telecom billing and invoicing service with integration and unit test coverage of around 90%.
- Handled database migration, involving data export, dump files, and connection string updates, from AWS to Azure, leading to cost reduction by 50%.
- Worked on non-functional requirements such as CI/CD and Automation testing.
- Collaborated with cross-functional teams in an agile environment to analyze client requirements, actively participating in different phases of software development, including requirement gathering, design, development, testing, and deployment.

Data Analyst, Heighten Innovative Solutions

July 2020 - June 2021

- Designed and implemented an automated inventory and deployment workflow using PnP.js, ReactJS, SharePoint, and Power Automate, reducing manual work by 40 hours per week and enhancing asset management efficiency.
- Delivered data-driven insights on demand and inventory dynamics, through both quantitative and qualitative analysis and presented them through Tableau dashboards and ad-hoc reporting.

PROJECTS

Personal Portfolio

- Enhanced web hosting with AWS S3, CloudFront, Route 53, and ACM, while automating updates through GitHub Actions(CI/CD) for a seamless deployment process.

Urban Pulse Social Fabrics

- Spearheaded the UPSF project, integrating Angular, D3.js, text mining, and computational topology for advanced data analysis and visualization; orchestrated deployment on Oracle Cloud with Ansible automation, leveraging Nginx, AWS Route 53, and Certbot SSL for robust, secure web service delivery.

VPC Creation with Terraform

- Designed and implemented a scalable AWS infrastructure using Terraform, encompassing VPC, Subnets, Internet Gateway, Route Tables, EC2, and Load Balancers, automated via GitHub CI/CD for efficient deployment and management.

Jenkins CI/CD Pipeline

- Designed and deployed a CI/CD pipeline integrating Jenkins, Ansible, Docker, and GitHub Webhooks on AWS, streamlining build, test, and deployment processes for improved scalability and workflow automation. Acquired practical DevOps skills, contributing to project efficiency and collaborative development.

Data Warehousing for Sparkify

- Conducted ETL to transfer data from AWS S3 to staging tables and a data warehouse on Redshift clusters. Designed an efficient data model for analytics, and employed IaC for AWS setup, boosting process efficiency and system control.

LEADERSHIP & INVOLVEMENT

- Guided 14+ young entrepreneurs with disabilities to lead and innovate through UIC's Entrepreneurship program.
- Certified in Red Hat Ansible and Google Advanced Data Analytics