

Sai Mona Duvvapu

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PROFILE

Engineer with 3+ years of experience implementing CI/CD pipelines, automating deployments, and ensuring application security. Experienced in Infrastructure as Code (IaC), Jenkins, Git, and Linux server administration and have transferable skills to work on Azure, GCP, or AWS. Skilled in optimizing cloud infrastructure, collaborating with cross-functional teams, and driving continuous improvement through automation, innovation, and analytics.

EDUCATION

Purdue University <i>Master of Science, Business Analytics and Information Management</i>	Indiana, United States <i>Aug. 2023 – Jul. 2024</i>
Chaitanya Bharathi Institute of Technology <i>Bachelor of Engineering, Information Technology</i>	Telangana, India <i>Jul. 2016 – Sep. 2020</i>

SKILLS

- **Technical Skills:** MySQL, PostgreSQL, Python, R, Shell Scripting, Groovy, HTML, JavaScript, CSS, Minitab, SAS EM
- **Frameworks:** NumPy, Pandas, Matplotlib, Scikit-learn
- **Visualization & Management Tools:** Tableau, Power BI, Microsoft Office, Smartsheet, Rally, Splunk, Dynatrace

EXPERIENCE

Prediction Guard <i>Technical Consultant (Industry Practicum)</i>	Indiana, United States <i>Jan 2024 - Mar 2024</i>
<ul style="list-style-type: none">• Implemented federated learning (FL) framework across simulated clients, enabling privacy-preserving model and complying with policies like GDPR, HIPAA, CCPA.• Optimized and deployed large language models (LLMs) like mBART on high-performance cloud computing (HPC) servers, reducing model size by 99.5% (from 2.9GB to 3.1MB) using efficient Adapter modules to facilitate federated learning on devices with resource limitations.• Executed FL for image classification on CIFAR-10 dataset, achieving 92% accuracy with 50ms training time per round.• Outperformed centralized approach by 3% in accuracy for federated text classification on IMDB dataset with BERT model.	
Ford Motor Pvt. Ltd. <i>Senior DevOps Engineer</i>	Tamil Nadu, India <i>May 2022 - Jul. 2023</i>
<ul style="list-style-type: none">• Implemented end-to-end CI/CD pipelines, leveraging Jenkins to enable automated deployment of code from Git, and applying SRE principles and reduced deployment time by 45% for 8 projects.• Automated access provisioning for the web application, cutting fulfillment time for data requests by 35% for Level 1 team and created health validation checks and alerts for production servers improving availability by approx. 20%.• Integrated Checkmarx (SAST Tool) into the deployment pipelines, reducing security vulnerabilities in Git code by 95%.• Orchestrated the migration from AEM 6.4 to AEM 6.5, overseeing all stages from initial assessment to final deployment.	
<i>DevOps Engineer</i>	<i>Dec. 2020 – Apr. 2022</i>
<ul style="list-style-type: none">• Developed ETL processes to ingest multi-format data from higher environments to test environments, including images and videos - reduced manual efforts by 50% and accelerated user acceptance testing.• Architected and maintained secure data infrastructure on Linux servers and CDN, following cyber security best practices to ensure integrity of sensitive information.• Led the coordination between business stakeholders and domain provisioning team for eCommerce websites of 5 countries.• Troubleshoot and resolved network-related issues for all the markets due to network misconfigurations and API failures.	
<i>Application Support Analyst</i>	<i>Jul. 2020 – Dec. 2020</i>
<ul style="list-style-type: none">• Collaborated with product teams to ensure adherence to global Critical Success Factor & Critical to Quality metrics and resolved 100% of data issues reported by internal customers within SLA.	

PROJECTS

Optimizing Gap Inc.'s Trends and Product Strategy <i>Python, Case Analysis, Web Scraping</i>
<ul style="list-style-type: none">• Performed web scraping to collect and analyze over 5K product data points from e-commerce sites including Amazon and Zara along with Gap Inc.'s subsidiaries to draw insights on the impact of data-driven creative process.• Achieved top 5% project grade through demonstrated analytical rigor and effective limitations evaluation.
Marketing Campaign Optimization Database Refinement <i>SQL, Data Engineering, Normalization, Query Optimization</i>
<ul style="list-style-type: none">• Led the normalization of a Marketing firm's database to enhance data integrity and efficiency, resulting in 20% improvement in overall marketing campaign performance.• Optimized SQL queries and database structure, resulting in a 15% boost in customer engagement and click rates.

CERTIFICATIONS

- **Certifications:** AWS Solution Architect Associate (SAA-C03), Microsoft Azure: Cloud Fundamentals, Tableau Desktop Specialist, Google Cloud Digital Leader (GCP)