Chaitanya Chaudhari

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EDUCATION

George Mason University

Fairfax, VA

Master of Science in Computer Science GPA: 3.83/4

Aug 2024 - Expected May 2026

Savitribai Phule Pune University

Pune, India May 2020 – Jun 2024

Bachelor of Engineering in Computer Engineering

EXPERIENCE

Software Development Intern

Jan 2023 – Mar 2023

Cognifront Software Pvt. Ltd

- Architected high-performance full-stack web applications using JavaScript, PHP, and SQL, optimizing algorithms to improve system responsiveness by 30% through statistical analysis and query optimization
- Engineered distributed deployment workflows using DevOps practices, reducing backend latency by 20% and enhancing concurrent user handling for large-scale data processing in enterprise software solution
- Led cross-functional collaboration with development and business teams using Agile methodologies on system architecture design, achieving 15% improvement in real-time data processing capabilities for scalable application

PROJECTS

High-Performance News Analytics Platform | Python, newspaper3k, MarianMT Ma

May 2025 – Jun 2025

- Pioneered NLP microservices for multilingual news fact-checking using newspaper3k, Hugging Face's MarianMT, and Chroma, achieving 85% claim verification accuracy and reducing false information spread by 15
- Deployed containerized enterprise-grade Streamlit application with Docker for real-time analysis of large-scale datasets, implementing zero-shot classification models with 80% accuracy

F1 Machine Learning Prediction Engine | Python, Scikit-learn, FastF1, SHAP

 $Mar\ 2025 - Apr\ 2025$

- Built high-accuracy Gradient Boosting model with Scikit-learn and FastF1 to predict Formula 1 winners, achieving Mean Absolute Error of 0.45 seconds and boosting prediction accuracy by 15% through enhanced preprocessing.
- Analyzed large-scale telemetry datasets using Python pandas and scikit-learn for anomaly detection, demonstrating statistical analysis skills applicable to security event correlation and threat detection

High-Availability NGINX Cluster on AWS EC2 | AWS EC2, VPC

Feb 2025 – Mar 2025

- Created enterprise-grade NGINX web server cluster using Kubernetes and Docker containers on AWS EC2, configuring Virtual IP across multiple Availability Zones to achieve 99.9% uptime.
- Orchestrated the configuration of automated server recovery procedures using Keepalived and NGINX, leading to a 50% reduction in potential downtime events via comprehensive cloud infrastructure testing.

DockPilot – AI-Powered Dockerfile Generator | Python, Llama 3, Ollama

Dec 2024 - Jan 2025

- Devised cloud-native containerization tool leveraging Llama 3 via Ollama to generate optimized Docker files for multiple programming languages, reducing development time by 80% through automation and DevOps.
- Introduced microservices architecture using Go for backend services, managed with Kubernetes orchestration and automated CI/CD pipelines through GitHub Actions.

Uni-Survey - Full Stack Campus Survey App | Spring Boot, MySQL, RDS, Angular Oct 2024 - Nov 2024

- Designed and deployed full-stack survey application serving 1,000+ concurrent users, using Angular, Spring Boot, and MySQL on Amazon RDS, ensuring 99.9% uptime and 20% improved user satisfaction.
- \bullet Conducted security testing using OWASP methodology and implemented role-based access controls for 25+ API endpoints, ensuring data privacy compliance

TECHNICAL SKILLS & COMMUNITY ENGAGEMENT

Programming Languages: Java, Python, C++, JavaScript, R, SQL, Go

Machine Learning & AI: Scikit-learn, Hugging Face, Deep Learning, Generative AI Programming

Cloud Infrastructure: AWS, Azure, Docker, Kubernetes, Linux, CI/CD Pipelines, Apache Kafka, Redis, Terraform

Development Tools: Git, GitHub Actions, Jenkins, RESTful APIs, Infrastructure as Code

Unix/Linux Systems: Linux Administration, Shell Scripting, System Performance Tuning, Process Management Published technical articles on Medium sharing expertise in Machine Learning Engineering, MLOps practices, and software engineering best practices