

Chaitanya Chaudhari

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EDUCATION

George Mason University

Master of Science in Computer Science GPA: 3.83/4

Fairfax, VA

Aug 2024 – Present

Savitribai Phule Pune University

Bachelor of Engineering in Computer Engineering

Pune, India

May 2020 - June 2024

EXPERIENCE

Web Development Intern

Jan 2023 – March 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 solutions
- 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 applications

PROJECTS

High-Performance News Analytics Platform | Python, newspaper3k, Hugging Face

May 2025 – June 2025

- Architected scalable NLP microservices using newspaper3k, Hugging Face's MarianMT, and Chroma vector database to enable accurate fact-checking of multilingual news, achieving 85% claim verification accuracy
- 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

March 2025 – April 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.
- Integrated real-time data feeds from OpenWeatherMap API and developed performance visualization tools using SHAP and Matplotlib, demonstrating strong analytical problem-solving skills for model interpretability

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

Feb 2025 – March 2025

- Architected and deployed enterprise-grade NGINX web server cluster using Kubernetes and Docker containers on AWS EC2, configuring Virtual IP across multiple Availability Zones achieving 99.9% uptime
- Implemented automated failover mechanisms with Keepalived and NGINX using DevOps practices, reducing downtime risk by 50% through rigorous testing in scalable cloud infrastructure

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

Dec 2024 – Feb 2025

- Developed cloud-native containerization tool leveraging Llama 3 via Ollama to generate optimized Dockerfiles for multiple programming languages, reducing development setup time by 30% through automation and DevOps
- Implemented 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 – Dec 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.
- Containerized application components using Docker and orchestrated with Kubernetes for seamless deployment and scaling, securing 25+ RESTful API endpoints with role-based authentication

TECHNICAL SKILLS & COMMUNITY ENGAGEMENT

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

Cloud Infrastructure: AWS (EC2, RDS, VPC), Docker, Kubernetes, Apache Kafka, Redis, Linux

Development Tools: Git, CI/CD, GitHub Actions, RESTful APIs, Microservices Architecture, Jenkins

Databases: MySQL, PostgreSQL, MongoDB, Time-Series Databases

Methodologies: Agile, Scrum, DevOps, Test-Driven Development, CI/CD.

Mentored junior developers and led cross-functional teams in Rotaract Club technology initiatives.

Published technical articles on [Medium](https://www.medium.com/@chaitanya) sharing knowledge on software engineering