# Vaishnavi Chilakamarthi

Linkedin: https://www.linkedin.com/in/vaishnavi-chilakamarthi

Email: vchilakamarthi@ufl.edu

Portfolio: https://vaishu98.github.io/Portfolio/ Gainesville, Florida, United States of America

#### **Education**

# • The University of Florida

Gainesville, USA

Master of Science - Computer and Information Sciences; GPA: 3.83/4

Aug 2022-May 2024

Github: github.com/vaishu98

Mobile: (352)-665-0657

Courses: Mathematics for Intelligent Systems, Distributed Operating Systems, Analysis of Algorithms, Machine Learning, Multimodal Data Mining, Natural Language Processing, Advanced Data Structures, Advanced Topics in Data Science, Divergent Thinking

# • The Jawaharlal Nehru Technological University

Kakinada, India

Bachelor of Technology - Information Technology; GPA: 8.88/10

Jul 2016-Sep 2020

Courses: Operating Systems, Data Structures, Design and Analysis Of Algorithms, Machine Learning, Computer Networking, Database Management Systems, Web Programming, Software Engineering, Cloud Computing, Artificial Intelligence and Machine Learning

#### **Skills Summary**

- Languages: Python, JAVA, C, JavaScript, Typescript, CPP, Bash, Erlang
- Databases: MySQL, Oracle(PL/SQL), MongoDB, InfluxDB, PostgreSQL, DynamoDB, Amazon RDS, SQLite
- Frameworks: React, Angular, Spring Boot and Microservices, Spring Cloud, Scikit, TensorFlow, Keras, Django, Flask
- Tools: Docker, Kubernetes, Grafana, Maven, Terraform, TensorFlow, GraphQL, GIT, Jira, Prometheus, Helm
- Platforms: Linux, Web, Windows, AWS, GCP, Cloud

## **Experience**

#### • The University of Florida, Citrus Research and Education Center

Gainesville, FL, USA

• Student Assistant Jul 2023-Dec 2023

- Engineered *Foodrator*, a dynamic web application that processed over a million product combinations and analyzed more than 1000 flavors, resulting in comprehensive ratings and trend-based scoring.
- Drove a significant 20% reduction in bounce rate through the implementation of a robust back-end, leveraging Django and PostgreSQL, and optimizing the front-end with React, Recharts, and Material UI.
- Realized streamlined deployment in a production environment with Docker and AWS EKS, ensuring seamless access, utilization, and reducing latency by 20%.

#### Tata Consultancy Services

TCS Synergy Park, Hyderabad, India, 500032

Division: Nextgen Research & Development, Technology Business Unit

### Systems Engineer

Jul 2020-Jul 2022

- Designed microservice architecture and factory patterns for NEUREDA, an HPA job execution platform, enhancing job execution speed by 30%. Implemented Spring Security, resulting in a 99% reduction in unauthorized access attempts.
- Implemented Eureka service discovery for a 20% improvement in service registration efficiency and utilized Feign Client to reduce API response times by 25%, all while collaborating cross-functionally for on-time delivery of 100% planned features within the SDLC timeline.
- Automated AWS resource management, reducing manual efforts by 80% and increasing provisioning speed by 60%. Achieved 85% faster deployment through a robust CI/CD pipeline, cutting production costs by 40%.
- Leveraged Prometheus for EKS cluster analysis and metric extraction, streamlining reporting by 90%. Attained 99.9% uptime with AWS ELB for high availability and load balancing.
- Exercised advanced Data Analytics and Machine Learning techniques to develop an accurate Resource Prediction System, reducing Electronic Design Automation job execution delays by 80%.
- Migrated EDA batch jobs to the cloud, cutting operational expenses by 20% and saving \$50,000 annually.

#### **Projects**

• Digi-Schools: School management system for a 70% improvement in operational efficiency by streamlining functions and enhancing overall management. Tech: Angular JS, Springboot, Spring Cloud, MySQL Jan 2020

• Loan Prediction System: AI model to approve or reject a loan application. Speeds up the loan process at banks by 50%. Tech: Python, Django, Matplotlib, Seaborn Sep 2019

• Driver Drowsiness Detection: Convolutional Neural Network with 99.7% accuracy built to alert a sleepy driver. Curbs the road accidents that occur due to driver fatigue by 20%. Tech: Python, Flask, OpenCV, Keras Jan 2019

#### **Certifications and Awards**

• AWS Certified Cloud Practitioner

Dec 2022-Dec 2025

• Top coder at TCS CodeVita 9

Apr 2019

• Runner's Up at HackWithInfy hackathon

May 2019

• Titled Best Camp Leader at National Service Schema for leading 240 hours of community service

Dec 2018

Sep 2016-Dec 2018

• Coordinator at Google Developers Club, spearheading hackathons and workshops that influenced 1000 students