Neethika Prathigadapa

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SUMMARY

Software engineering graduate student specializing in backend systems, full-stack development, and applied machine learning. Experienced in building RESTful services, distributed pipelines, and containerized applications with emphasis on performance, reliability, and scalable design.

CORE SKILLS

Languages: Python 3.x, Java 11, JavaScript (ES6+), SQL, Go, Bash
Backend: Go Microservices, Node.js, REST APIs, JWT Auth, Async Processing
Frontend: React 18, Angular 15+, HTML5, CSS3
ML/AI: CNNs, scikit-learn, Pandas, NumPy, Grad-CAM, SHAP
Cloud/DevOps: AWS (EC2, S3 basics), Docker, Kubernetes, GitHub Actions, Linux
Databases: PostgreSQL, MySQL, SQLite, MongoDB
Engineering: Data Structures, Algorithms, Unit Testing, Debugging, Agile/Scrum

EXPERIENCE

Machine Learning Intern — Mar 2025 – Apr 2025
SkillDzire

- Developed end-to-end supervised ML pipelines in Python using scikit-learn, improving baseline classification accuracy by **12%**.
- Designed preprocessing workflows and evaluated models using precision, recall, and confusion matrices, reducing false positives by **18%**.

Software Engineering Intern (Full Stack) — Nov 2024 – Jan 2025
TechnoHacks Edutech

- Engineered RESTful backend services for authentication and business logic using Node.js, supporting **100+ active users**.
- Built React frontend components with structured validation, reducing API failure rates by **20%**.
- Optimized database queries and API contracts to improve response consistency and frontend rendering performance.
- Implemented logging and exception handling frameworks to debug cross-service issues and stabilize production builds.
- Collaborated in Agile sprints, participating in code reviews and deployment cycles.

System Administrator & Automation Intern — Apr 2024 – Sep 2024
ServiceNow (Remote)

- Developed Python and Bash automation scripts streamlining monitoring across **10+ services**, reducing manual checks by **35%**.
- Analyzed logs and alert patterns to identify root causes of recurring incidents.
- Built operational dashboards enabling proactive infrastructure issue detection.

EDUCATION

University of Florida, Gainesville, FL — Aug 2025 – May 2027
M.S. in Computer Science — *GPA: 3.89 / 4.0 — Expected May 2027*

- Coursework: Advanced Data Structures, Mathematical Foundations for Intelligent Systems, Analysis of Algorithms, Distributed Multimedia Systems, Internet Storage Systems, Software Engineering, Operating Systems, Machine Learning, Databases

Mahatma Gandhi Institute of Technology, Hyderabad, India — Nov 2021 – Jun 2025
B.Tech in Information Technology — *GPA: 9.21 / 10 — Gold Medal*

SELECTED PROJECTS

NeuroXAI: Explainable Brain Tumor Detection using EfficientNet
Python, EfficientNet, CNN, Grad-CAM, Saliency Maps, Canny Edge Detection

- Developed an MRI-based brain tumor classification system using EfficientNet trained on **7,023 MRI images**, achieving **99% validation accuracy**.
- Implemented preprocessing pipelines with normalization, augmentation, and **Canny edge detection** to enhance structural feature extraction.
- Applied **Grad-CAM saliency maps** and SHAP-based explainability to visualize tumor-relevant regions, improving clinical interpretability and reducing false positives by **22%**.

Sentinet AI: Multi-Channel Product Intelligence Platform
Angular, Go, REST APIs, Docker, PostgreSQL

- Architected multi-tenant ingestion pipelines from Jira, Slack, CSV, and support tools.
- Built Go microservices for clustering, pain scoring, and evidence retrieval.
- Implemented ranking logic combining frequency, recency, sentiment, and account tiers.

MercatoCloud: Multi-Vendor E-Commerce SaaS
React, Node.js, MongoDB, Docker, Stripe APIs

- Designed SaaS backend supporting 8–10 vendors with JWT-based RBAC.
- Built APIs managing 200+ products and optimized checkout latency by **30%**.
- Containerized services and deployed via CI pipelines.

CERTIFICATIONS

Cisco Programming Essentials in Python — Oracle Java Foundations — ServiceNow Certified System Administrator