NITHYA REDDY BILLA

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Summary

A graduate student in computer science with a background in web development, machine learning, and programming. knowledgeable about providing cutting-edge solutions, such as blockchain-based counterfeit drug prevention and real-time text recognition. competent in using technologies like AWS, Python, and SQL to accomplish a variety of project goals and working with teams to develop scalable solutions..

Education

University of North Carolina at Charlotte, MS in Computer Science-GPA: 4.0/4.0	Aug 2024 – May 2026
Institute of Aeronautical Engineering, BS in Computer Science-GPA: 3.6/4.0	Aug 2020 – May 2024

Skills

Languages: Python, C, Java, JavaScript **Web Development:** HTML, CSS, React.js **Machine Learning:**PyTorch, TensorFlow

Cloud computing: AWS, Hadoop, Spark **Database:**SQL **Data Analytics and visualization:**Matplotlib, Seaborn, PowerBI

Certifications:IBM-Data Science tools,**EPAM-**Front end technologies,**CISCO-**Programming essentials in Python

Experience

Software Engineer Intern, Ideabytes – Hyderabad,IN — Nov 2023 – Jan 2024

- Designed and developed a text recognition system leveraging Google ML Kit to extract and process text from images.
- Optimized the preprocessing pipeline for image inputs to improve text detection accuracy in varied lighting conditions.
- Integrated the text recognition feature into a mobile application to enable seamless real-time scanning and extraction of text.
- Conducted extensive testing across diverse datasets to ensure robustness and adaptability for multilingual text recognition.
- Automated data validation processes by utilizing recognized text for downstream analysis and use-case-specific workflows.
- Collaborated with team members to brainstorm solutions for improving OCR accuracy and reducing processing time.
- Documented the system's architecture and workflow, ensuring comprehensive knowledge transfer for future scalability.

Web Developer Intern, CodTech IT solutions – Hyderabad,IN — Feb 2024 – Apr 2024

- Developed responsive portfolio and e-Commerce Web pages using HTML, CSS, and JavaScript to enhance user experience.
- Collaborated with stakeholders to gather requirements and implement features such as dynamic content and interactive UI.
- Optimized code and conducted multi-device testing to ensure cross-browser compatibility and enhance website performance.

Projects

Implementing blockchain technology in prevention of counterfeit drugs(04/2023-07/2023)

- Spearheaded a blockchain-based project to combat counterfeit medications, ensuring the authenticity of pharmaceutical products.
- Developed an algorithm to validate and track original medicines and created node points for secure data storage
- Demonstrated proficiency in blockchain frameworks and cryptographic algorithms while delivering an impactful solution.
- Tools Used: Ethereum, SHA algorithm

Immediate Animal Recognition and anticipation using ML approaches (05/2022 - 07/2023)

- Led an academic project aimed at advancing animal recognition techniques through machine learning.
- Designed and implemented a prototype leveraging GSM modules, Arduino Uno, and ML classification techniques to enhance recognition accuracy.
- Played a key role in code development and prototype completion, showcasing expertise in applied ML methodologies.
- Tools Used: GSM module, ardinouno, ML classifier techniques.

Publications

Immediate Animal Recognition and Anticipation Classification for Harvest Fields Using Machine Learning Techniques–10.1109/ICONSTEM60960.2024.10568615 — June 2024