SAI SINDHU MUPPANENI
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EDUCATION

Master of Science in Computer Science (GPA: 3.64/4)
Portland State University – Portland, OR
September 2022 – June 2024
Bachelor of Technology in Electronics and Communication Engineering (GPA: 3.56/4)
St. Ann's College of Engineering and Technology – Chirala, India
June 2016 – September 2020

SKILLS

Programming Languages: C, Python, SQL, HTML, CSS, MATLAB
Frameworks & Tools: Node.js, Bootstrap, Restful API, Git, Jupyter Notebooks, Google Colab
Cloud Services: Amazon S3, AWS Lambda, AWS Glue, AWS Redshift, GCP
Data Analysis & Machine Learning: Data Cleaning, Feature Engineering, Scikitlearn, TensorFlow, Keras, PyTorch
Testing Tools: JMeter, Selenium
Databases: MySQL, NoSQL, MongoDB, DynamoDB

PROFESSIONAL EXPERIENCE

Associate Quality Test Engineer – Arcserve India Pvt Ltd, Hyderabad
April 2020 – August 2022

- Collaborated on full-stack testing projects, designed and executed test plans for data backup/recovery software across storage environments (Tape, NAS, SAN).
- Led efforts in regression, integration, and end-to-end testing, identifying and resolving software defects to enhance product quality.
- Utilized automated testing tools like Selenium and JMeter to improve test efficiency, contributing to project deadlines and deliverables.

PROJECTS

Autonomous Ambulances in Healthcare – Python, Machine Learning, Data Analysis

- Researched the application of autonomous vehicles in emergency response, focusing on reduced response times and ethical challenges.
- Built simulations and conducted AI evaluations to assess the economic impact and proposed solutions for real-world implementation.

ADDIT AI Puzzle Game – Python, Minimax Algorithm, Jupyter Notebook

- Developed an AI-driven puzzle game using the Minimax algorithm with Alphabeta pruning for enhanced decision-making and efficiency.
- Conducted multiple trials to optimize gameplay and improve performance in complex scenarios.

Detection of Lung Tuberculosis – *Python, Machine Learning*

- Built a machine learning model using algorithms like KNN and Gradient Boosting for high-accuracy tuberculosis detection.
- Preprocessed medical images, achieving improved diagnosis rates.

Planets Voice Application – *Node.js, Firebase, Dialogflow*

- Developed a voice-activated app using external APIs to provide data on celestial bodies.
- Integrated Node.js and Firebase for real-time interaction and information retrieval.

Health Insurance Marketplace – Python, SQL, PostgreSQL

- Designed and implemented a marketplace system, structuring large datasets and writing SQL queries to validate and optimize database architecture.

Blood Cell Classification Using CNN – MATLAB, Sony Neural Network Console

- Built and trained CNN models for medical image classification, achieving superior accuracy compared to traditional methods.

CERTIFICATIONS

AWS Cloud Practitioner

ADDITIONAL QUALIFICATIONS

- Active Duolingo user with a passion for education and a current streak of learning.
- Committed to advancing education accessibility in line with Duolingo's mission.
- Proficiency in collaborating on large-scale projects and leading individual deliverables, including developing infrastructure, optimizing processes, and integrating new technologies.