Ankit Rijal

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PROFILE

Aspiring Machine Learning Engineer with a software development background and experience in building scalable applications. Proficient in Python, C#, PostgreSQL, and ReactJS, with knowledge in ML frameworks like TensorFlow, Keras, PyTorch and scikit-learn. Skilled in data processing, system optimization, and developing data-driven solutions to enhance efficiency and innovation.

SKILLS & ABILITIES

Machine Learning: TensorFlow, Keras, PyTorch, scikit-learn, Hugging Face Transformers, Generative AI, Transformer Architecture, CNN, RNN, LSTM, Attention Mechanisms, Autoencoders, GANs, Reinforcement Learning, Streamlit, LangChain, RAG, ChromaDB
Programming Languages: Python, C#, JavaScript, TypeScript
Database & Cloud: PostgreSQL, SQL, AWS, Render
Frameworks & Development: .NET, ReactJS, React Native, Flask, HTML, CSS
Version Control & Tools: Git, GitHub, Docker, CI/CD (GitHub Actions)

CERTIFICATES

- GEN AI LANGUAGE MODELING WITH TRANSFORMERS, IBM
- ADVANCED DEEP LEARNING SPECIALIST, IBM
- MACHINE LEARNING WITH PYTHON (V2), COURSERA

PROFESSIONAL EXPERIENCE

SOFTWARE DEVELOPER | THE REYNOLDS AND REYNOLDS | 2022 – 2024

- Led and collaborated on the development and maintenance of KeyTrak applications (Desktop, Web, Mobile), impacting over 5,000 automotive dealerships, real estate firms, and corporate offices.
- Spearheaded 20+ feature rollouts using Agile methodologies, improving deployment efficiency by 30% through a robust CI/CD pipeline.
- Developed and optimized 30+ RESTful APIs, implementing SOLID principles for enhanced scalable, maintainable solutions.
- Ensured software reliability by achieving 95%+ unit test coverage with Jest, significantly reducing production defects.
- Collaborated cross-functionally with teams of 10+ developers, ensuring timely delivery of high-impact software solutions.

Tools and Technologies: PostgreSQL, PowerShell, C#, .Net, React JS, TypeScript, React Native, Jest, pgAdmin, Tortoise SVN, Visual Studio, Visual Code, Phabricator, Jenkins, Slack, Git, Github Actions.

NOTABLE WORK PROJECTS

SVN to GitHub Repository Migration

- Successfully migrated a large SVN repository to GitHub, improving developer collaboration by 20% and streamlining version control.
- Utilized custom scripts and GitHub Actions, reducing deployment time by 30% and improving CI/CD efficiency.
- Migrated 50+ build processes from Jenkins to GitHub Actions, enhancing automation and reliability.

Database Update Automation

- Created a PowerShell script and console application to automate database updates, reducing manual intervention by 90%.
- Integrated automation into the CI/CD pipeline, decreasing update time by 50%.
- Improved efficiency, ensuring 99% uptime and eliminating critical errors during database updates.

PERSONAL PROJECTS

SENTIMENT ANALYSIS WEB APP

Technologies: Python, Flask, ReactJS, Hugging Face Transformers, Flask-CORS, SciPy

- Built a responsive web app with ReactJS and Flask to analyze sentiment of user-input text using a pre-trained RoBERTa model from Hugging Face Transformers.
- Created a user-friendly UI with real-time updates and ensured seamless cross-origin communication using Flask-CORS.
- Optimized performance and accuracy with SoftMax and robust backend design.

HOUSING PRICE PREDICTOR WEB APP

Technologies: Python, Streamlit, Scikit-learn, Pandas

- Developed a web app to predict housing prices using a Random Forest model, with real-time user input and visualizations via Streamlit.
- Built robust preprocessing pipelines to handle categorical, numeric, and non-numeric data, ensuring accurate predictions.
- Visualized model performance metrics (RMSE, R^2) and results, providing clear insights into model accuracy and predictions.

WEATHER APP

Technologies: Python, Flask, ReactJS, OpenWeatherMap API, Render

- Built a fully responsive web application using Flask as the backend, with a ReactJS frontend for an interactive user experience.
- Integrated the OpenWeatherMap API for real-time weather data, including temperature, humidity, sunrise-sunset times, and other weather conditions.
- Conducted extensive testing for functionality and cross-platform compatibility.

EDUCATION

MASTER'S IN ARTIFICIAL INTELLIGENCE, UNIVERSITY OF THE CUMBERLANDS, KY | CURRENT
BACHELOR'S IN COMPUTER SCIENCE, EAST CENTRAL UNIVERSITY, ADA, OK