

Rajesh Babu Pasupuleti

937-580-8681 | prajeshbabu99@gmail.com | [Linkedin:pasupuleti-rajesh-babu](https://www.linkedin.com/in/pasupuleti-rajesh-babu) | [Github: Pasupuleti-rajesh-babu](https://github.com/Pasupuleti-rajesh-babu)

EDUCATION

University of Dayton

Masters of Computer Science

Dayton, OH

Aug. 2022 – May 2024

SRM Institute of Science and Technology

Bachelors of Technology in Computer Science and Engineering

Tamil Nadu, India

june. 2018 – May 2022

TECHNICAL SKILLS

Languages: Python,C, C++, HTML, CSS, Bash Scripting

Data Analysis Libraries: Pandas, NumPy, SciPy, Scikit-learn, TensorFlow, Keras, PyTorch, Matplotlib, Seaborn

Machine Learning Algorithms and NLP: Linear Regression, Logistic Regression, Decision Trees, Random Forests, Gradient Boosting Machines, Neural Networks, Support Vector Machines , NLTK, spaCy, Gensim, Transformers

Cloud Platforms and Deployment: AWS, Azure, GCP, Terraform, Git, GitHub, Docker, Kubernetes, Jenkins

Database Management: MySQL, MongoDB

EXPERIENCE

Developer Intern

April 2022 – Sep 2022

Linux world informatics private limited

Jaipur, India

- Utilizes Docker to create container images with Python3 and either Keras or NumPy installed, enabling automated setup of machine learning environments
- Implements a Jenkins pipeline with five jobs for GitHub repo pulling, environment setup, model training, optimization, and retraining/notification, streamlining the entire machine learning workflow.
- Incorporates an additional job for monitoring container health, ensuring continuous operation by automatically restarting containers if failures occur during model training

Developer Intern

April 2020 – Sep 2020

Linux world informatics private limited

Jaipur, India

- Automated CI/CD Pipeline: This project establishes an end-to-end Continuous Integration and Continuous Deployment pipeline using Jenkins and Kubernetes. It automates the deployment process from code integration to testing and deployment
- Dynamic Deployment Environment: The pipeline dynamically selects the appropriate language interpreter container based on the code being pushed to GitHub, ensuring efficient and customized deployment environments. It leverages Kubernetes for container orchestration, enabling scalability and flexibility in managing deployment resources
- Fault Tolerant and Notification System: The pipeline incorporates error handling mechanisms, such as email notifications to developers in case of deployment failures. This ensures timely communication and allows for quick resolution of issues, maintaining a reliable and robust deployment process

PROJECTS

Image Caption using Vision Encoder Decoder Models | *GPT2, Vision Transformers, Hugging Face Libraries*

- * Developed an image captioning system combining Vision Transformers (ViT) and GPT-2 models, achieving a 90 improvement in caption accuracy.
- * Utilized the Flickr8k dataset with 8,000 images and five captions each, implementing a Vision Encoder Decoder Model. ViT handled image features, and GPT-2 generated coherent captions.
- * Evaluated the model using the Rouge2 metric, demonstrating 90% accuracy, paving the way for applications in accessibility services, security, and beyond.

Car Licence Number Plate Detection | : *Python, NumPy, SCIKIT, Pandas, HTML, CSS, OCR, CNN, etc.*

- * Developed a Minecraft server plugin to entertain kids during free time for a previous job
- * Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review
- * Implemented continuous delivery using TravisCI to build the plugin upon new a release
- * Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin