PRADYUMN PUNDIR

(551) 342-1369 | ppundir1@stevens.edu | linkedin.com/in/pradyumn-pundir/ | github.com/pradyumn25 | NY

EDUCATION

Master of Science in Computer Science Aug 2023 – Dec 2023

Stevens Institute of Technology, Hoboken, NJ 3.953 GPA

TECHNICAL SKILLS

Language & Database: Python, JavaScript, PostgreSQL, Firebase, MongoDB

Framework & Libraries: NumPy, Pandas, Scikit, TensorFlow, Keras, Express, Node.js, React.js, MLflow

Other Skills & Technologies: Machine Learning, Deep Learning, NLP, AWS, CI/CD, Docker, Kubernetes

EXPERIENCE

Developer Analyst Intern at Barclays, Whippany, NJ: June 2023 – Present

- Led team building scalable Node.js & React.js app with MongoDB for 3000+ employees. Implemented continuous testing, integration & deployment on-premise using Docker. Resulted in improved employee interaction & network growth. Recognized for leadership & successful platform delivery, receiving positive feedback. Collaborated with stakeholders to align with goals & gather requirements, demonstrating effective project management. Fostered a more connected & engaged workforce through user-friendly interface

RESEARCH AND PUBLICATIONS

Towards a Multimodal System for Precision Agriculture using IoT and Machine Learning

- Discovered methods to improve crop productivity with less human intervention. through various machine learning algorithms such as Random Forest, LGBM, and KNN. Pre-Trained CNN models such as VGG16, Resnet50, and DenseNet121

On CI/CD for Automated Deployment of Machine Learning Models using MLOps

- Study provides a more in-depth look at machine learning lifecycle as well as key contrasts between DevOps and MLOps. Includes tools and methodologies for executing the CI/CD pipeline of machine learning frameworks

MOFit: A Framework to reduce Obesity using Machine learning and IoT

- Built a framework using machine learning algorithms Random Forest, Decision Tree, Extra Trees, and KNN to predict obesity levels, bodyweight, and fat percentage levels, followed by the Hyperparameter optimization to increase model's accuracy

ACADEMIC PROJECTS

Body-Fat-Prediction-with-Machine-Learning-and-MLOps

- Developed a comprehensive machine learning framework utilizing algorithms such as Random Forest, Decision Tree, XGBoost, Extra Trees, and KNN, with hyperparameter optimization (HPO) using Genetic Algorithm, Random Search, Grid Search, and Optuna. Achieved accurate predictions for obesity levels, bodyweight, and fat percentage.
- Implemented continuous integration and continuous deployment (CI/CD) to deploy a user-friendly web app using Python Flask on Azure. Utilized DVC and MLflow for model performance tracking, resulting in an accessible and optimized solution for predicting body metrics through machine learning (Project Link)

Better Interview Book

- Developed a web portal where user can leverage an advanced matching algorithms for personalized recommendations, network with like-minded peers, explore companies. The web application was built using node.js, react.js, and mongodb as the database
- Website was containerized using docker to ensure optimal performance and scalability. Additionally, implemented Continuous Integration/ Continuous Deployment and the website was hosted on the digital ocean server (Website Link)