Pranav Ramesh

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EDUCATION

Master of Science, Data Analytics Dec 2024
San Jose State University, San Jose
GPA: 3.57/4.00
Coursework: Data Visualization, DBMS, Machine Learning, Big Data, Deep Learning, Data Mining

Bachelor of Engineering, Computer Science & Engineering Aug 2020
Dr. Ambedkar Institute of Technology, Bengaluru
GPA: 4.00/4.00

TECHNICAL SKILLS

Programming Languages: Python (Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, NLTK, spaCy, TensorFlow, PyTorch), SQL
Statistics: Hypothesis Testing, Time Series Analysis, ARIMA
Machine & Deep Learning: Classification, Regression, Data Science Pipeline (cleansing, wrangling, visualization, modeling, interpretation), Model Evaluation, CNN, RNN
Data Engineering: Data Preprocessing, Feature Engineering (PCA, t-SNE), ETL (Extract, Transform, Load)
Data Analysis & Visualization: Alteryx, Microsoft Excel, Tableau, Microsoft Power BI
Deployment Tools: Version control (Git), Docker, FastAPI
Automation Tools & IDEs: Microsoft Power Apps, Microsoft Power Automate, Microsoft SharePoint, MySQL Workbench, VS Code

INTERPERSONAL SKILLS

Communication, Teamwork, Leadership, Adaptability, Time Management, Problem Solving, Critical Thinking, Collaboration, Mentoring, Networking

PROFESSIONAL EXPERIENCE

Software Engineer 1, Juniper Networks, Bengaluru, India Jul 2020 - Jan 2023

- Integrated project risk and sprint data into a **Tableau dashboard**, resulting in a **33% increase** in **operational efficiency**.
- Developed **"Job Rotation Tool"** with **Power Apps**, enhancing **organizational agility by 17%** through **streamlined job applications**.
- Deployed **Credits Tableau dashboard**, driving a **23% productivity** improvement for the PM team with comprehensive credit details.
- Engineered **15 Power Apps tools** and **5 Tableau dashboards**, earning accolades such as **"Out of this World" (Dec 2022), "Fly to Moon" (Sept 2022), "Rocket to Space" (July 2022), and "Recognition of the Month" (Mar 2021)** for their substantial impact on business operations.

Intern 3 Professional Services, Juniper Networks, Bengaluru, India Jan 2020 - Jun 2020

- Crafted **robust Power Apps tools** and implemented **automation through Power Automate**, yielding a **13% reduction** in **manual tasks**, and **enhanced efficiency gains**.
- Employed **Microsoft Excel, SharePoint, and Tableau** for **structured data storage** and **insightful visualizations**, leading to a **15% improvement** in project management efficiency throughout the lifecycle.
- Implemented a **centralized project management platform** powered by a custom **Power Apps application**, seamlessly **integrating data** from **OpenAir**, **MySQL Workbench** and other sources, resulting in a **20% reduction** in **project cycle time** and a **15% increase** in **on-time project delivery**.

PROJECT EXPERIENCE

Data Mining Workforce Dynamics: Understanding Employee Attrition Apr 2024 - May 2024

- Employed **XGBoost, AdaBoost, Logistic Regression, Random Forest** on IBM HR data to predict attrition.
- Optimized recall to **77%** with **XGBoost; 70%** with **Logistic Regression, Random Forest** by **fixing the precision** to **30%**.
- **Business case: $50,000** lost employee cost vs. **$15,000** retention; potential **$35,000** saving per retained employee.

Advancing Agricultural Sustainability: Deep Learning for Soil Classification Apr 2024 - May 2024

- Used Fine-Tuned **DenseNet121** and **ResNet50** models pre-trained on ImageNet, **augmented with custom layers** and **L2 regularization** technique, to **mitigate overfitting** and classify soil types from **1300 images**.
- Employed **t-SNE** for **visualizing** soil data in **lower dimensions**, **revealing clustering** and **distribution patterns**.
- Achieved **87.63% accuracy** with **ResNet50** and **85.57%** with **DenseNet121**, highlighting deep learning's role in improving agricultural soil classification.