# PRERNA YADAV

New York, NY 10038 | prernay1498@gmail.com | (551)-260-4890 | GitHub | LinkedIn | prernayadav.github.io

# **EXPERIENCE**

# Machine Learning Assistant | Seidenberg School of CS/IS, Pace University

Sep 2023 – May 2024

- Designed and optimized logistic regression, decision trees, and neural networks using Python, TensorFlow, scikit-learn, and PyTorch to predict patient outcomes, achieving a 15% improvement in accuracy.
- Conducted data preprocessing tasks, including missing value imputation, normalization, and feature extraction from electronic health records (EHRs), and implemented feature selection methods for enhanced model performance.
- Validated models using cross-validation, implementing performance metrics such as accuracy, precision, recall and performed hyperparameter tuning with grid search and random search to optimize model parameters.
- Documented research methodologies and results in technical reports, contributed to academic publications, and presented findings at university research symposiums, receiving commendation for clarity and impact.

# Software Engineer | Boss Program, OASIS, Pace University

Mar 2023 - Aug 2023

- Implemented data cleaning, transformation, and visualization using Python, SQL, and Tableau to optimize efficiency in sustainability research. Contributed to the development of predictive models and algorithms, enhancing publications and presentations on environmental conservation and sustainable resource management strategies.
- Collaborated with faculty to conduct in-depth analysis of large datasets, delivering insights that informed strategic decisions on environmental policy and sustainable development. Administered database systems, ensuring data integrity and implementing security protocols for sustainability research initiatives.

### Information Technology Services Intern | EdMedia, Pace University

Aug 2023 - May 2024

- Assisted tier 1-3 support for 500+ users across Windows, Linux, and Android devices. Diagnosed complex software issues.
  Configured & installed over 200 software apps, operating systems suites (Microsoft Office, G Suite) on devices.
- Caught over five thousand defects and bugs which helped to decrease the number of bugs found in production by 25%.

### Software Engineer | GS E & C Mumbai Pvt.Ltd

Mar 2020 - May 2022

- Engineered scalable cloud solutions using AWS and Azure, implementing microservices with Docker and Kubernetes.
- Conducted market research and created user personas, increasing user engagement by 35% and customer retention by 25%.
- Developed machine learning models for predictive maintenance, reducing equipment downtime by 60% and increasing production efficiency by 30%.
- Led agile development teams, delivering projects 20% ahead of schedule while maintaining high-quality standards.

# **VIRTUAL WORK SIMULATIONS**

# Accenture, Data Analytics & Visualization Consulting Virtual Work Simulation, The Forage

Jun 2024 - Present

 Analyzed customer datasets, remediating data quality issues & building Tableau dashboard to summarize trends, presenting customer behavior insights to stakeholders to inform strategic decision-making.

#### **HACKATHON**

Data Scientist | Automatic Bearing Defect Inspection System | Python, ML, Computer Vision, | [SIH - (SKF)]

Mar 2019

• Achieved high-precision defect detection through real-time defect classification with Machine Learning algorithms. Also used Conceptualized Computer vision, Python & tkinter with an efficient data centralization mechanism and enriched with visual analytics via Matplotlib ensuring remarkable accuracy with 75.6% accuracy.

# **EDUCATION**

Master of Science (MS) in Information Systems | Concentration: Data Science

May 2024

Pace University, Seidenberg School of CS and IS | New York.

Bachelors in Computer Science | University of Mumbai

Feb 2021

#### **TECHNICAL SKILLS AND TOOLS**

Tools/Frameworks: Packages:

Languages/Skills:

Python, R, SQL, Tableau, PowerBI, GCP BigQuery, AWS, AA (RPA), PySpark, PyTorch, MongoDB, Postgres torch, scikit-learn, pandas, NumPy, sweetviz, seaborn, statsmodels, tidyverse, h2o.ai, ggplot2, dplyr Java, JavaScript, C++, Kotlin, Object-Oriented Programming, JavaScript, TypeScript, React, Angular,

React-Native, HTML5, CSS3, Bootstrap, jQuery, Node.js, Express, MySQL, MongoDB, Postgres, RESTful API

### **PUBLICATIONS**

Paper Published: Vol. 5, Issue 10, October 2016 – ISSN: 2278-1021 - TEES: Search Scheme over Encrypted Data

Volume: 04 Issue: 03 | Mar-2017 - ISSN: 2395 -0056 - Web of Short URL's