Akash Rane

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PROFILE

Aspiring Data Enthusiast with a strong foundation in machine learning and data analysis, pursuing a Master's in Computer Science with a focus on Data Science. I am proficient in Python, SQL, and data visualization tools, with some hands-on experience in developing and generating actionable insights from complex datasets.

EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems — New York, NY
Master's in Computer Science | **Concentration**: Data Science & Data Analyst | GPA**: 3.72/4** — Dec 25

SPPU - Savitribai Phule Pune University — Pune, India
Bachelor of Engineering in Computer Engineering | **Concentration**: Data Science | **GPA: 8.18/10** — Jul 22

RELEVANT COURSEWORK

Data Analysis | Machine Learning | Advanced Data Structure | Object Oriented Programming | Project Development | Cloud Computing

TECHNICAL SKILLS

Programming Languages: Python, C++, C, HTML, CSS, Java, Javascript
Database Management: SQL, PL -SQL, Influx DB
Data Visualization Tools: Power BI, Node Red, Influx DB, Grafana
Libraries: Seaborn, Matplotlib, Pandas, OpenCV, Sklearn, Keras, TensorFlow, Sckit Learn

PROFESSIONAL EXPERIENCE

Optify Industrial Solutions Pvt. Ltd. — Pune, India
Computer Science Engineer & Business Intern — Jul 22 – Dec 23

- Developed a Python project to deliver daily insights and reports to factory owners, improving decision-making efficiency.
- Designed user-friendly dashboards for the control panel system, enhancing usability and operational oversight.
- Developed OPC-UA and other communication protocols for seamless integration with control panels using Python, enhancing system connectivity and automation for factories.
- Facilitated on-site project implementation for 1 month to ensure smooth deployment and integration.
- Created pitch decks and delivered funding pitches, securing government grants for the company.

PROJECTS

Automated Operational Analytics and Reporting — Oct 21

- Developed a python automation script leveraging Matplotlib, Pandas and Influx DB, to streamline data processing and generate daily operational reports for factory owners, saving 30% of their time and enhancing data driven decision-making.
- Created a single compound graph to deliver comprehensive insights into 8 key metrics of factory operation which helped in immediate operational oversight and efficiency for the factory.

Credit Card Default Prediction & Analysis — Sep 24

- Developed a machine learning model using Random Forest and SMOTE oversampling to predict credit card defaults, achieving 98.64% accuracy on the test set.
- Conducted comprehensive data preprocessing, including feature engineering and missing value imputation for key variables, enhancing model input quality.
- Implemented a financial status classification system and derived significant insights into customer default behavior based on income, debt, and employment history.

Prediction Model of Exhaust Air Temperature — Aug 21

- Built a neural network model using TensorFlow and Keras to Predict exhaust air temperature by optimizing mean squared error with the Adam optimizer, enabling real-time user input for accurate predictions.

PUBLICATIONS

- Title: Application for Real Time Object Measurement, Journal: International Journal of Advanced Research in Science, Communication and Technology, Year: 2022, Link:IJARSCT_Paper5228
- Title: An Experimental Assessment of Deep Learning on Highway Driving, Journal: Journal of Science and technology at National Conference on Cognitive Computing., Year:2021, Link: [Paper, Certificate]

LEADERSHIP

Sinhgad Student Council, Sponsorship Department Head

- Led sponsorship efforts as Sponsorship Head for the Sinhgad Student Council, securing a title sponsor and three event partners for university events and teams.