SATYAM PANDEY

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Skills, Awards and Paper

Languages and Databases: Python(NumPy, Pandas, Scikit-learn, Statsmodels, Matplotlib) R, Java, C++, React | MySQL, PostgreSQL, MongoDB

Skills: Data cleaning, EDA, Regression, Classification, Time Series, Supervised & Unsupervised Learning, Feature Engineering, Pipelines

Tools: Power BI, Tableau, Excel, MATLAB, VS Code, Jupyter, Bloomberg, GitHub, Microsoft Suite, Power Apps, AlgoTrader, QuantConnect

Other Skills: Data Analysis, Financial Modeling, RESTful APIs, GraphQL, Machine Learning, Predictive Modeling, Data Mining, Gen AI, OpenAI API, Feature engineering, Web Scraping, CI/CD, ETL Pipeline, AI/ML, Git, GitHub, Bash scripting, Reinforcement Learning, Agile

Cloud Services: AWS, GCP, Microsoft Azure, S3, EC2, Lambda, RDS, API Gateway, Azure DevOps, Databricks, FinOps, Containers, Docker

Awards and Certifications and Virtual Internships: Great Employee (ZS), Academic Scholarship (NJIT), Data Science Certificate (Harvard), Cloud AWS Practitioner (AWS), Technology Consulting Internship (PwC), Machine Learning (Google & Meta), Investment Banking (JP Morgan)

Published Paper: Machine Learning and Deep Learning Models for the Analysis and Prediction of Pharmaceutical Powder Blend Properties

Work Experience

EXELON — Philadelphia, Pennsylvania, USA

Senior Quantitative Analyst — **January 2024 – Present**

- Developed predictive models on energy affordability, boosting forecast precision by 7% and enabling proactive outreach initiatives.
- Optimized the IVR system using AI-powered decision workflows, reducing 5 million annual customer service calls through automation.
- Integrated and analyzed multi-source datasets using Python (Pandas, NumPy), generating actionable insights and elevating analytics.
- Designed AI-driven models using advanced statistical forecasting and scenario simulation, increasing strategic planning efficiency by 5%.
- Engineered data pipelines and affordability analytics solutions, driving a 2% reduction in energy costs for underserved households.
- Applied Round-Robin performance modeling to complex project metrics, streamlining cross-functional resource allocation by 35%.
- Built an end-to-end ETL pipeline with Node.js from the P6 database, embedding ML predictions to accurately forecast project timelines.

National Science Foundation: NJIT — Newark, New Jersey, USA

Data Scientist - Machine Learning Engineer — **September 2022 – January 2024**

- Boosted compound prediction accuracy by 45% by integrating ML models into a Node.js-based backend and React frontend for NSF.
- Implemented a drug formulation method using ML, reducing production costs by 38% and delivering substantial pharmaceutical savings.
- Created over 40 interactive and dynamic dashboards using React and AWS QuickSight, improving insights for pharmaceutical researchers.
- Achieved a 30% efficiency boost by streamlining ETL-based data processing using Python, Spark, and Hadoop within the CI/CD pipeline.
- Validated predictive data models using RStudio, Excel, and Tableau, achieving 15% accuracy boost in forecasting hourly and daily data.

ZS Associates — Pune, Maharashtra, India

Cloud Application Engineer and Developer — **September 2019 – July 2022**

- Developed quantitative dashboards using Tableau, Power BI, Python, and R, achieving a 30% enhancement in the rendering speed.
- Automated data pipelines for a 15% boost in efficiency using PowerShell scripts, streamlining data manipulation and feature engineering.
- Fostered relationships with 50+ pharmaceutical clients, demonstrating strong stakeholder engagement in analytics and statistical modeling.
- Conducted AWS cost analysis with time-series models, saving ~$2 million in 2022, leveraging Machine Learning for future cost-saving.

The Tech Inc. — Nagpur, Maharashtra, India

Software Engineer — **May 2018 – August 2019**

- Enhanced bookings volume by 30% on a travel platform by enhancing React-based UI/UX and a targeted SEO optimization strategy.
- Reduced development time and errors by 15% by translating business requirements into automated test cases using CI/CD pipelines.

Education

New Jersey Institute of Technology — **Newark, New Jersey, United States**
Master of Science, Computer Science — **GPA:** 3.90/4.00

Shri Ramdeo Baba College of Engineering and Management — **Nagpur, Maharashtra, India**
Bachelor of Engineering, Information Technology — **GPA:** 3.12/4.00

Products and Projects

Path-Finder AI - An AI-powered resume analyzer that helped over 10,000 candidates optimize applications and craft recruiter-ready profiles.

Mail-Stream - A mass email automation tool that enabled over 150 students to land on-campus jobs and expand their professional networks.

Web Scraping - An engine using social media data to analyze sentiments around academic freedom and free speech with Python and NLP tools.

Achievements

Startup Success: Founded Backstreet Books, a thriving startup connecting students and second-hand sellers, helped students to get required books.
Team Excellence: Three-time Best Player of the Year prize (2016-2018) at RCOEM, showcasing leadership, teamwork, and strategic prowess.
Leadership & Mentorship: Awarded Best Student in Investment & Trading (2021) and led a team of ~35, conducting innovative Webinars.
Revenue Enhancement: Identified revenue opportunities via AWS quantitative analysis, enhanced by new automation for operational efficiency.