Vandana Sinha

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EDUCATION

University of North Texas — Texas, United States
Master of Science in Computer Engineering; GPA: 4.0/4.0 — Aug 2021 – May 2023
- **Coursework**: Deep Learning, Big Data, Neural Networks, Natural Language Processing, Computer Algorithms

SKILLS SUMMARY

- **Programming Languages**: Python, R, SQL, Git
- **Databases**: Microsoft SQL Server, Oracle 11g, MySQL
- **Machine Learning**: Linear regression, Clustering, SVM, Random Forest, Predictive Modeling, Time Series Forecasting
- **Data Reporting**: SAP BO, Power BI, Tableau, Google Data Studio
- **Tools**: Confluence, Microsoft Office, JIRA, RStudio, GCP, AWS, Snowflake
- **Soft Skills**: Storytelling, Collaboration, Leadership, Time Management, Innovation

EXPERIENCE

San Jose University — United States
Data Science Research Analyst — Jun 2023 – Present
- **Federated Learning Framework**: Architected high-performance federated learning framework using PySyft and TensorFlow, processing 10x more data.
- **Generative AI Models**: Developed state-of-the-art Generative AI models using transformer architectures (GPT-3, BERT) and neural rendering techniques.
- **Bias Mitigation Algorithms**: Integrated bias mitigation algorithms to improve fairness and reduce harmful outputs.
- **User Studies**: Spearheaded user studies to evaluate real-world impact of AI solutions.

Intel Corporation — United States
Data Scientist — May 2022 – Dec 2022
- **AI and ML Integration**: Integrated deep learning models (CNN, RNN) into hardware platforms, improving customer engagement.
- **Customer Insights**: Enhanced customer satisfaction through data-driven analysis and quantitative techniques.
- **Cross-Functional Collaboration**: Collaborated across teams, applying data-driven decision making to solve business challenges.
- **Recognition**: Recognized for pioneering AI-driven processes reducing customer complaints by 20%.

Crisil — New York
Senior Data Scientist — Sep 2017 – Aug 2021
- **Fraud Detection**: Developed ML models to detect fraudulent activities, reducing incidents by 12%.
- **Time Series Forecasting**: Applied time series forecasting to drive profit increases in trading strategies.
- **Marketing Mix Models**: Built marketing mix models leveraging diagnostic insights for data-driven decision making.
- **SQL Scripts**: Built SQL scripts using BigQuery for creating reports, increasing productivity by 18%.

Nokwood Consulting Services — India
Data Warehouse & Digital Marketing Analyst — Aug 2011 – Aug 2017
- **Data Cleansing**: Executed data cleansing and wrangling techniques using Informatica PowerCenter, improving data quality by 16%.
- **Digital Marketing Optimization**: Optimized marketing campaigns, boosting click-through rates by 15% and ad efficiency by 20%.
- **Automated Reporting**: Developed automated dashboards using Power BI, enhancing data accessibility by 10%.
- **Mentoring**: Mentored junior data scientists in Python programming and machine learning techniques.

Hewlett Packard — India
Data Engineer — Aug 2007 – Jul 2011
- **Real-Time Issue Resolution**: Architected data mapping strategies using Unix shell scripting, meeting stringent deadlines.
- **Inventory Optimization**: Engineered inventory optimization algorithm, improving system performance by 17%.
- **ETL Integration**: Implemented Informatica PowerCenter ETL tools, reducing downtime and boosting efficiency.
- **Automation Initiatives**: Spearheaded development and automation initiatives using Unix shell scripting, increasing HP's market share by 10%.

PROJECTS

- **Sentiment Analysis using Deep Learning**: Implemented CNNs and LSTM for sentence-level sentiment classification, boosting accuracy by 22%.
- **Brain Tumor Detection**: Trained ML models for brain tumor detection in MR images, achieving 89% accuracy.
- **Meal Planning App**: Developed a cross-platform meal planning and shopping app, adopted by 10,000+ users.
- **CPU Scheduling Simulation**: Developed CPU scheduling algorithms, improving CPU utilization by 30%.

HONORS AND AWARDS

- **Intel Incubation program**: Recognized for innovative venture ideas and accomplishment.
- **Star Performer**: Recognized for problem-solving skills, commitment, and outstanding performance.
- **HP Recognition**: Honored for exceptional work at HP, including an E- Award.