

VANDANA SINHA

Hillsboro Oregon
(971)371-8926

[linkedin.com/in/vandana-sinha](https://www.linkedin.com/in/vandana-sinha)
vandanasinha7@gmail.com

CAREER SUMMARY

Senior Data Scientist driving measurable business impact through advanced analytics. Adept at translating strategic priorities into data-driven solutions, propelling 2% fraud reduction within 8 months and 5% profit gains via quantitative modeling. Skilled in transforming complex datasets into actionable insights, optimizing forecasting accuracy and elevating customer metrics up to 5%. Technical expertise combined with business acumen boosted market share 10%. Dedicated to delivering creative data science solutions that directly influence core KPIs - amplifying solution efficacy 5%, diminishing grievances 4%, and increasing product loyalty 2%. Proven leader adeptly aligning cross-functional teams and stakeholders.

Areas of Expertise

Data-Driven Decision Making – Advanced AI/ML Techniques – Diagnostic, Predictive, and Prescriptive Analytics – Statistical and Machine Learning Methods – Data Wrangling and Programming –Algorithm Development – Data Quality Improvement & ETL Tool Integration – Cross-Functional Collaboration – Mentorship and Team Development

PROFESSIONAL EXPERIENCE

Intel Corporation Folsom – California, United States

May 2022 - Dec 2022

Solution Architect

- **Data Science and Customer Behavior Insights:** Enhanced customer satisfaction by 5% and solution performance by 3% through advanced data modeling and quantitative analysis in Python, providing deep insights into customer behavior and improving engagement and retention.
- **Strategic Integration of AI in Product Development:** Pioneered the integration of AI technologies into hardware platforms, driving a 1% increase in Xeon product loyalty and a 2% rise in customer engagement, aligning with cross-functional strategies and product improvement initiatives.
- **Cross-Functional Collaboration and Problem Solving:** Reduced customer grievances by 4% and heightened solution efficacy by 5% by collaboratively addressing customer challenges with tailored solutions, showcasing problem-solving skills and data-driven decision-making across business teams.
- Recognized by Intel for exceptional problem-solving, having devised and introduced a new process that slashed customer complaints by 20%.

CRISIL Global Research Mumbai – Maharashtra, India

Sep 2017 - Aug 2021

Senior Data Scientist

- **Advanced AI/ML Techniques:** Spearheaded advanced AI/ML initiatives to enhance marketing effectiveness, resulting in reduction of fraudulent activities by 2% within 8 months by implementing advanced data models using Python, SQL, and R for transaction monitoring, demonstrating proficiency in quantitative analysis and data science methodologies.
- **Predictive Analytics:** Drove a 5% increase in profits through the development of data-driven trading algorithms, showcasing expertise in using quantitative analysis to adapt to market dynamics and influence business strategy. Led a team in performing diagnostic, predictive, and prescriptive analytics to support data-driven business decision-making
- **Financial Forecasting:** Improved financial forecasting accuracy by applying statistical modeling techniques to identify market trends and risks, enabling strategic adjustments in fast-paced financial settings. Developed and executed marketing mix modeling techniques, reshaping marketing solutions and empowering teams to make data-driven decisions.
- Honored with Star and CLAP awards at CRISIL for exemplary performance, contributing to a 15% uplift in customer satisfaction.

Freelance – Mumbai, Maharashtra, India

Aug 2011 - Aug 2017

Senior Data Warehouse & Digital Marketing Analyst

- **Data Driven Decision Making:** Achieved a 6% enhancement in data quality by developing and applying new data cleansing methods in Informatica, translate data into actionable insights for critical decision-making.
- **Campaign Optimization:** Utilized statistical and machine learning methods for increasing digital marketing campaign click-through rates by 5% and improved ad budget efficiency by 2% using strategic A/B testing and thorough statistical analysis.
- **Data Accessibility:** Enhanced data accessibility by 10% and facilitated real-time KPI tracking through collaboration on automated reporting dashboards in BI and SAS.
- **Cross-Functional Reporting:** Streamlined decision-making and proactive performance optimization by incorporating diverse insights into the development and implementation of sophisticated reporting tools. Engaged with stakeholders to understand business processes and developed hypotheses to guide test design and research validation.
- Spearheaded the training and development of junior data scientists and analysts, leading to a 7% increase in project efficiency and 5% improvement in data quality metrics.

Data Engineer

- **Data Mapping Efficiency:** Streamlined real-time issue resolution within tight deadlines by developing and executing data mapping strategies using Unix, Informatica, and Oracle.
- **Algorithm Development:** Utilized advanced programming skills to create an innovative algorithm, resulting in a 7% increase in system performance over six months.
- **ETL Integration:** Successfully integrated Informatica-ETL tools into data transformation processes within six weeks, significantly reducing downtime and boosting efficiency.
- Received widespread acclaim and numerous accolades at HP as a pivotal contributor to development and automation efforts, boosting market share by 10%.

EXTRA CURRICULAR

San Jose State University – California, United States

Jun 2023 - Present

Research Assistant

- Design and develop a high-performance Federated Learning (FL) data handling framework for medical data that can process 10x more data per second than existing solutions.
- Developed novel generative AI models for text and image synthesis using transformer architectures and diffusion models.
- Implemented techniques to improve fairness, safety, and responsibility in AI systems, reducing bias and harmful outputs.
- Conducted user studies to evaluate human-computer interaction and measure real-world impact.

University of North Texas Denton – Texas, United States

Jan 2022 - May 2023

Teaching Assistant

- Enhanced data-driven education models, leading to a 2% increase in student satisfaction and a 4% improvement in assignment performance through effective quantitative analysis and modeling.
- Leveraged statistical insights to devise personalized tutoring programs, achieving a 2% decrease in failing grades and a 1% increase in student retention, demonstrating a strong foundation in data-driven decision-making.
- Pioneered the use of gamification and flipped classroom techniques, resulting in a 2% rise in student engagement and a significant 6% boost in exam results.

EDUCATION

Master of Science, Computer Engineering – GPA 4.0/4.0

Graduation Date – May 2023

University of North Texas Denton – Texas, United States

Master of Science, Information Science

Graduation Date – May 2007

Birla Institute of Technology – Mesra Ranchi, Jharkhand, India

MEMBERSHIPS

- Attained membership in The Honor Society of Phi Kappa Phi at the University of North Texas, distinguishing myself among the top 10% academically.

TECHNICAL PROFICIENCIES

- Data-Driven Decision Making
- Advanced AI/ML Techniques
- Diagnostic, Predictive & Prescriptive Analytics
- Statistical & Machine Learning Modeling
- Data Wrangling & Programming (Python, SQL)
- Algorithm Development
- Data Quality Improvement & ETL Integration
- Cross-Functional Collaboration & Leadership
- Quantitative Analysis & Data Storytelling
- Database Technologies (Snowflake, MySQL)
- Data Visualization (Tableau, PowerBI)
- Virtualization (Docker, Kubernetes)
- Agile Methodologies
- Business Acumen & Strategic Thinking