

# Madhulika Vandana

Champaign, Illinois | [linkedin](#) | vandana7@illinois.edu

## EDUCATION

Masters in Business Analytics	University of Illinois Urbana Champaign, Illinois	May 2024
Bachelor's in Electronics and Communication	Jawaharlal Nehru Technological University, India	April 2019

## WORK EXPERIENCE

<b>Data Analyst   Business Practicum</b> Exelon, Illinois	Aug '23- Mar '24
<ul style="list-style-type: none"><li>Analyzed various deposit types, annual deposit totals, and location-specific losses by applying Python</li><li>Developed predictive models and shared insights with the clients as per their requirement</li></ul>	
<b>Senior Project Engineer</b> Wipro, Bengaluru, India	Dec' 21 – Jul' 23
<ul style="list-style-type: none"><li>Developed end-to-end Sales dashboards using SQL Server Reporting Services(SSRS), SQL Server Management Studio(SSMS), Advanced Excel, SAP HANA, Tableau and Power BI</li><li>Led a data migration project where I referred to developments made in Tableau and SAP BusinessObjects and developed the same in Power BI, reducing report generation time by <b>30%</b></li><li>Produced analytics for 5+ recurring annual industry reports, leveraging consumer transaction datasets and advanced data analysis techniques, which contributed to a <b>20% year-over-year increase</b> in report accuracy</li><li>Tested and verified data quality and accuracy in large datasets, encompassing <b>over 10 million</b> records, implementing rigorous testing protocols that enhanced data reliability by <b>99.5%</b></li><li>Conducted thorough quality assurance testing followed by User Acceptance Testing (UAT) of new systems or features and documented the results, subsequently presented findings to stakeholders</li></ul>	
<b>Project Engineer</b> Wipro, Bengaluru, India	Jun' 19 – Dec '21
<ul style="list-style-type: none"><li>Gathered information from various data sources and executed complex <b>SQL</b> queries to clean, pre-stage, extract and transform data in the data-pipeline process</li><li>Generated interactive dashboards to produce and track Key Performance Indicators (KPIs) and scheduled reports to interpret patterns and trends, saving <b>over 15 hours</b> of manual work per week</li><li>Analyzed and optimized the underlying data architecture and data flow, resulting in a <b>40%</b> reduction in data processing time and improved data accuracy</li><li>Utilized strong SQL skills and understanding of database structures, like Snowflake, to manage and analyze large datasets, ensuring high data quality and accuracy for strategic business applications</li><li>Developed and executed plans for cleaning and structuring large datasets annually, aligning with the strategic analytics delivery approach, which enhanced data quality by <b>50%</b></li></ul>	

## PROJECTS

<b>Financial Analysis: Predictive Modeling for Cook County Property Valuation</b>	Sep' 23-Nov' 23
<ul style="list-style-type: none"><li>Developed a machine learning prediction model to forecast property values for the Cook County Assessor's Office (CCAO), overcoming challenges posed by diverse parcels spanning <b>130+ municipalities</b>, including city of Chicago</li><li>Achieved <b>75%</b> accuracy with open-source datasets within 2 weeks employing lasso regression, linear regression, pruned regression tree, and random forest</li></ul>	
<b>Consumer Analysis: Customer Behavior and Shopping Habits</b>	Sep 23 – Nov 23
<ul style="list-style-type: none"><li>Led retail consumer behavior analysis project using Tableau and Python, with a focus on age, gender, and seasonality's impact on dressing preferences. Key responsibilities included data wrangling, such as importing and cleaning datasets, identifying and addressing missing values, and formatting data for analysis</li><li>Performed advanced customer trends analysis, identifying states with the highest previous purchases and popular categories</li><li>Analyzed seasonal dynamics and their effects on consumer behavior, offering macro insights for strategic business alignment</li></ul>	

## LEADERSHIP EXPERIENCE

<b>EPICS   Local Chapter Lead</b>	Aug'16- Dec'18
<ul style="list-style-type: none"><li>As part of Engineering Projects in Community Services(EPICS), I led a team of 30 members to build projects which catered to the needs of underprivileged people and helped in the community development</li><li>Organized events, to help educate lesser privileged children, and worked towards the awareness and betterment of various pressing social issues through the “<b>Sustainable Development Goals</b>” framed by the <b>United Nation</b></li></ul>	

## SKILLS

<ul style="list-style-type: none"><li><b>Technical skills:</b> MySQL, Python, pandas, numpy, sklearn, seaborn, R programming, ETL</li><li><b>Dashboarding skills:</b> Tableau, MS Excel, Power BI</li><li><b>Business and soft skills:</b> Agile Methodology, Scrum, JIRA, Project management</li><li><b>Certifications:</b> Microsoft: Power BI Data Analyst Associate, Microsoft: Azure Fundamentals, KNIME, Google Foundations of Project Management, IBM Data Analyst Professional Certificate</li></ul>	
--	--