# SATHVIKA KONDAMADUGU

skonda21@uic.edu 3126138629 Chicago, Illinois LinkedIn

## EDUCATION

**MS Computer Science,** *University of Illinois at Chicago* 2023 – 2025 | Chicago, United States

**BTech, Computer Science & Engineering,** Hyderabad, India
*Malla Reddy College of Engineering and Technology*

## PROFESSIONAL EXPERIENCE

**Database Engineer,** *Hitch this Pvt Ltd* 01/2023 – 07/2023 | Hyderabad, India
- Designed and implemented a scalable relational database for the e-commerce platform using SQL to create normalized schemas, enhancing data integrity and reducing redundancy.
- Developed robust ETL pipelines for the e-commerce data management system by designing and implementing automated data workflows using SQL and Python scripts. This ensured accurate data extraction, transformation to meet schema requirements, and loading into the central database.
- Implemented data integrity and security measures by creating constraints and indexes, applying encryption techniques, and establishing user access management protocols to protect sensitive data.
- Analyzed and optimized complex SQL queries by identifying bottlenecks, rewriting inefficient queries, and adding appropriate indexing, reducing query execution time by 30% and improved system performance.

**Data Research and Analyst,** *Lentra AI* 01/2022 – 12/2022 | Banglore, India
- Analyzed over 4 million data points across various data streams in the loan processing sector, extracting critical insights that directed data-driven strategic planning and operational enhancements.
- Developed and implemented data pipelines using SQL, Kafka and Python to process and secure customer data from various sources, including creditworthiness, past loan details, and repayment history, handling datasets of up to 500,000 records for robust credit scoring models.
- Implemented identity verification using face recognition techniques like CNN for user authentication.
- Utilized location-based data for targeted lead generation, improving marketing strategies using data mining techniques like Association Rule Mining.
- Ensured the highest security standards for data protection and privacy using encryption, secure data handling practices, and regular security audits.
- Developed fraud detection algorithms using anomaly detection techniques on historical data like K-Nearest Neighbors (KNN), Support Vector Machine (SVM) to identify and mitigate potential risks effectively.

## SKILLS

PROGRAMMING LANGUAGES: Python, Java, JavaScript, HTML, CSS, R, C, C++, MATLAB, PHP, SQL, C#

WEB FRAMEWORKS: React, Material UI, Django, Spring Boot, Angular, Node.js, ASP.net

DATABASES : MySQL, PostgreSQL, T-SQL, MongoDB, Kafka, Elasticsearch

Machine Learning Libraries: Numpy, Pandas, MatplotLib, Scikit-Learn, PyTorch, Tensorflow, Seaborn

Data Visualization: Tableau, Microsoft PowerBI, Canva, Google Charts

## PROJECTS

**Market Basket Analysis**
- Used the kaggle dataset of a cafe's sales (The Bread Basket) to find out the various spending patterns and relations between various products.
- Performed Exploratory Data Analysis to visualize the acquired patterns about the purchases made using bar plots for different time scales.
- Used Apriori algorithm in order to analyze and compare the influence of rules formed by different items.

**Technologies used**: Pandas, Numpy, MatPlotLib, Seaborn, Apriori

**Telecom Churn Prediction**
- Used a telecom company's dataset with various attributes relating to the loss of customers and performed exploratory data analysis in the form of heatmaps, histograms, KDE plots, barplots etc. to find relationships between churn and various attributes such as total charges, contract tenure, active internet connection etc.
- Used Logistic Regression, Random Forest, AdaBoost, XGBoost and Support Vector Machine algorithms to predict churn and formed an ensemble with these five models with a hard voting classifier & obtained an F1-score of 0.815.

**Techologies used**: Pandas, NumPy, MatPlotLib, Seaborn, SciKit-Learn

**Netflix Dashboard- Tableau**
- Developed an interactive Tableau dashboard visualizing 10+ key performance metrics, user engagement, and content analysis.
- Analyzed data from 100,000+ viewers, providing insights into preferences, content popularity, and subscription trends.
- Utilized advanced visualization techniques to handle datasets exceeding 1 million records, ensuring accurate information.
- Conducted testing and validation, maintaining more than 99.9% data integrity and reliability.

**Full Stack Web Application for House Party**
- Created a collaborative music playing application for parties, allowing guests to play music that suits the majority's preferences.
- Integrated the application with the third-party Spotify API.
- Developed a full-stack application using React for the frontend, managing state with Redux and styling with CSS3 and Material-UI, while building robust RESTful APIs with Django, integrating with SQL databases, and securing the application with JSON Web Token (JWT) authentication.