

Tharoon Kumar Viswanathan

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EDUCATION

Master of Science in Information Systems | Northeastern University | Boston, MA | (G.P.A: 3.76) Jan 2021 – Dec 2022

Related Courses: Designing Data Architecture and Business Intelligence, Data Science Engineering methods, Database Management and Database Design, Advances in Data Science, Algorithmic Digital Marketing

Bachelor of Engineering in Computer Science | Sri Venkateswara College of Engineering | India Jun 2015 - May 2019

Relevant Coursework: Artificial Intelligence, Machine Learning, Object-Oriented Analysis, and Design, Database Management Systems

TECHNICAL SKILLS

Languages: Python, R, SQL, Java, C++, C
Database: MySQL DB, SQL Server, Oracle DB, MongoDB
Tools: Snowflake, Tableau, Power BI, Excel, Alteryx, GIT, DBeaver, Azure
Machine Learning: Regression, Classification, Clustering, Neural Nets, Natural Language Processing
Python Frameworks: NumPy, Pandas, Scikit-learn, OpenCV, Beautiful-Soup, Seaborn, PyPlot, TensorFlow, NLTK

WORK EXPERIENCE

Graduate Teaching Assistant | Northeastern University | Boston, MA Sept 2021 - Present

- Tutoring students for Advanced Data Science course and assisting a professor with the course curriculum design
- Mentoring students with concepts of Deep Learning, Transfer learning, CNN, and Advanced Visualization techniques

Associate Software Engineer | Accenture | Chennai, India Aug 2019 - Dec 2020

- Developed complex reports and dashboard using Power BI based on End User requirements which increased efficiency by 20%
- Presented Demographic data and key findings to management using interactive PowerBI dashboards to improve business decisions
- Extracted, transformed, and loaded data for data management using Alteryx, SAS, Python and, SQL
- Created a Machine Learning model to identify false leave requests by structuring data and reducing false claims by 24%
- Developed and troubleshooted numerous Data warehouse and business intelligence issues using SQL development and querying tools
- Enhanced verbal and written communication skills as a Team member in a cross-functional Scrum Agile Methodology

Data Analyst Intern | CSIR (Council of Scientific and Industrial Research) – CEERI | Chennai, India Jan 2019 - April 2019

- Created a Machine Learning model using python to test and analyze the health of the human heart using time series analysis
- Performed various statistical features to clean data and achieved an accuracy score of 86% and built dashboards in Tableau
- Extracted real-time data from wearable devices for analysis using sampling rate, low-pass filters, and mean peak rise height
- Performed data wrangling and Data Visualization on real-time data to identify, analyze and interpret patterns and gain better insight

ACADEMIC PROJECTS

Dallas Food Inspection Database Integration and Dimensional Modelling(ER Studio, Alteryx) Jan 2022 - Feb 2022

- Developed a dimensional model of Dallas Food Inspection dataset after converting the ER model into third normal form
- Loaded the multi-star schema into SSMS using SQL, Analyzed the data collected by cleaning, modifying, error handling and converting it to meet business objectives in Alteryx and then inserted it into tables using Talend.
- Devised interactive dashboard using Power BI and Tableau for analyzing, capturing and strengthen key business decision

Restaurant and Food Delivery Management System (Tableau, SQL Server) Oct 2021 - Dec 2021

- Implemented a centralized database linking restaurants, food delivery, and workflows under a common digital ecosystem
- Tracked annual food wastage of restaurants by using stored procedure and extracted business insight using Tableau Dashboards
- Delivered 5 business cases and reduced data retrieval time using 3 stored procedures, 2 triggers, 2 views, and Encryption of data

iPhone review system (NLP, Tableau, StreamLit, Jupyter Notebook, Snowflake, TextBlob) Oct 2021 - Dec 2021

- Hosted a platform in StreamLit to provide customers, Positive and Negative review descriptions of the various iPhone models
- Created NLP model to predict the reviews of the customers after performing Sentiment Analysis of the data using TextBlob
- Achieved an Accuracy score of 80% by using Random Forest and DNN and visualized the predicted results using Tableau

Customer Review Prediction and Visualization (Tableau, Snowflake, Jupyter Notebook, Beautiful Soup) Oct 2021 - Dec 2021

- Scrapped Reviews from Trustpilot site using beautiful soup and performed preprocessing on data using NLP methods, Stemming, Lemmatization and bag of words on the Dataset and uploaded it in MTurk for review analysis and stored in Amazon S3 bucket
- Implemented prediction of reviews using DNN and Random Forest algorithms with an Accuracy score of 90% and visualized those results using Tableau Dashboards for business presentation and proved accuracy using Confusion Matrix Method

Credit card Approval Prediction (NumPy, pandas, Matplotlib, sklearn, Seaborn) Apr 2021 - May 2021

- Determined a suitable Machine learning model by combining large datasets to predict whether a customer can be approved a credit card and achieved an Accuracy score of 88% and F1 score of 93% on the dataset of size 10,48,573 rows and 5 columns
- Performed Pre-Processing of the Customer Dataset and Interpreted the data through visualization and statistical techniques
- Achieved feature importance for the dataset using Random Forest Classifier model after performing Exploratory Data Analysis
- Implemented various models such as K – Nearest Neighbor, Decision Tree Classifier, Deep Neural Network, and XG Boost