

NAVEEN N. MEYYAPPAN

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Focused individual and a passionate learner, with real world data science experience, seeking a software engineering position that provides opportunity to solve compelling customer problems by leveraging the power of algorithmic solutions

EDUCATION

Rutgers University , New Brunswick, NJ, USA	September 2019 – May 2021
MS in Computer Science (Data Science)	GPA: 4.0/4.0
Anna University , Chennai, TN, India	August 2014 – May 2018
B.E. in Electronics and Communication Engineering	GPA: 8.47/10.0

WORK EXPERIENCE

Musigma Business Solutions , Bangalore, India	September 2018 – August 2019
Decision Scientist	
<ul style="list-style-type: none">Lead role for a client who was one of top 3 players in the Australian insurance sectorDelivered Tableau dashboards for Claims Recovery team to track claim status, predict claim recovery potential, and unearth long pending claims. Created data engineering pipeline to extract and transform data from data lake to Amazon Redshift to TableauDeveloped a Performance Evaluation & Analysis tool for Customer Problem Resolution Management team that enabled the client to analyze and grade their team member performance. The tool was accessible via Excel for ease of use, utilized VBA for automation and leveraged data from MS SQL serverAutomated 20+ Excel reports that improved Customer Advocacy & Reporting Team's productivity by 65%, reduced error rates by over 25% and improved resolution times significantly. Used VBA for data extraction from Netezza, report generation, and publishing the reports using Outlook	
Crofters Technologies , Chennai, India	July 2016 - September 2016
Product Engineer	
<ul style="list-style-type: none">Built the entire hardware component of a smart aquaponics garden system using an Arduino board, and integrated it with the server to enable automation and mobile App based control	
CSIR – Central Electronics and Engineering Research Institute , Chennai, India	June 2017
Research Intern	
<ul style="list-style-type: none">Developed a MATLAB based solution for analyzing purity of pepper using advanced analytical spectroscopy	

TECHNICAL SKILLS

Software Skills: C, C++, Java, Python, R, SQL, VBA, MATLAB, Spark, Excel, Tableau, Latex, Keras, Pytorch, Microsoft Office
Analytical Skills: Linear/Logistic Regression, Decision Trees, Random Forest, Clustering, Word to Vector Analysis, PCA
Relevant Course Work: Data Structures and Algorithms, Massive Data Storage and Retrieval, Databases, Probability and Statistics, Artificial Intelligence, Computer Architecture, Computer Networks
Coursera Coursework: Python for Programming, R Programming, SQL for Data Science, TensorFlow in Practice, Machine Learning

ACADEMIC PROJECTS

Algorithmic Cryptocurrency Trading System

- Developed a trading system based on deep Q-learning algorithm to automatically determine the position to hold for each trading period
- Trained and tuned the model with a 5-year bitcoin market data to determine the real-time position to be held for optimal outcome

Time, Compute and Space Efficient Mass File Data Transfer to Cloud

- Developed compression algorithm based on Huffman Encoding to reduce compute and storage required for mass file data transfer
- The new algorithm is space efficient and takes lesser time [$O(n^2)$ vs $O(n)$] when compared to the conventional Huffman method

Efficient Monaural Speech Separation System using Ideal Binary Mask (IBM)

- Reduced the complexity and improved efficiency of conventional CASA based monaural speech separation using MATLAB
- Developed a User Interface in MATLAB to demonstrate the improved efficiency of our algorithm by removing noise from speech

Implemented bi-directional A* Search in Python

- Implemented A* search algorithms to start from both ends of the graph until both the searches converge at a point
- Built User Interface using PyQt5 library to enable users to draw a random graph and apply the bi-directional search

Voice Based Indoor Navigation system for Visually Impaired

- Developed an Android App that helps visually impaired individuals to navigate the indoors of a building by providing voice prompts based on location information derived from proximity to the WiFi access points

AWARDS

Spot Award | Mu Sigma Business Solutions – Awarded for exceptional performance on the client project based on client team's input