# Abhinav Reddy Karra

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#### **EDUCATION**

University of Maryland Baltimore County

Master of Science in Computer Science: GPA: 3.75

Kakatiya Institute of Technology & Science

Bachelor of Engineering in Electronics and Communication Engineering; GPA: 3.7

Baltimore County, MD

Jan. 2021 – (Expected) Dec. 2022 Warangal, India

Aug. 2013 - Aug. 2017

## PROGRAMMING SKILLS

Programming Languages: Python, C#, Java, VB.NET, .NET MVC, React, JavaScript, HTML, CSS

Design / Analysis: Data Structures and Algorithms, Object-Oriented Programming (OOP)

Database Technologies: Oracle PL/SQL, MySQL, PostgreSQL

Data Visualisation Tools: Metabase, Tableau

Dev Tools / Applications: TFS, Git

## PROFESSIONAL EXPERIENCE

## TATA Consultancy Services Pvt. Ltd.

Software Engineer, Healthcare Products & Platform

Varanasi, India Apr. 2018 - Dec. 2020

- Developed and maintained a Hospital Management Application using .NET framework and PL/SQL
- Involved in all phases of the SDLC (Software Development Life Cycle) from analysis, design, development, testing, implementation and maintenance with timely delivery of the app features
- Designed and developed C#, VB.NET, JavaScript, HTML, CSS components using Object-Oriented Programming (OOP) which were critical to the 3-tier web application interacting with PL/SQL Database
- Improved application performance by 25% by fine-tuning stored procedures, SQL queries for efficient data retrieval
- Effectively made use of Functions, Indexes, Stored Procedures, Packages, Triggers, Materialized Views
- Generated reports, visualized data using Metabase, interpreted large and complex data sets using relational database, wrote complex queries using PostgreSQL
- Excellent communication skills with experience in onsite-offshore model interacting with clients and Onsite managers

  Arihant AI

  Ahmedabad, India

Software Intern

Jul. 2017 - Jan. 2018

- Worked with senior developers to review the problem report solution and implemented the solution
- Created database using MySQL, wrote several queries to extract required data from various sources
- Delivered assigned tasks involving data collection and filtering the data as per the client requirements

## ACADEMIC PROJECTS

## A Social Media Study on COVID-19 Long-Hauler Community

- Implemented data cleaning techniques to extract unstructured Facebook data into individual posts and comments
- Implemented NLP techniques for text pre-processing like Tokenization, use of Stop Words, Stemming, Lemmatization, POS tagging with pattern recognition to extract symptom related keywords from corpus data
- Implemented different feature extraction methods like Count vectors, TF-IDF (word level, n- gram level, char level)
- Performed semantic analysis, visualized the most discussed symptoms into a network graph and built word-tree
- $\bullet$  Built Machine Learning models for Text Classification with an accuracy of 75 80%

#### Designing an Interactive Visualization Leveraging Interactions of Long-Hauler Communities on Twitter

- Implemented data cleaning techniques, feature extraction on twitter data consisting of 20k tweets on covid data
- Built word-tree, word-cloud on most discussed topics extracted using Latent Dirichlet Allocation (LDA) model
- Built an interactive visualizing tool for presenting social media data to the Long-hauler community using Dash

#### React E-Commerce Web App

• Developed E-commerce web app using React (redux-saga, thunk, hooks), Firebase for authentication, stripe for payment gateway, and deployed using the Heroku cloud platform

#### ACHIEVEMENTS

• Awarded with Technical Excellence Award for my contribution to the organization at TATA Consultancy Services