# SINDOORA RAVIKUMAR MURTHY

Full Stack developer | Data Scientist

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#### **CAREER OBJECTIVE**

My goal is to become a successful Data scientist by arriving at methodologies to help in understanding a given domain by mathematically modelling and implementing the same through software solutions using Machine learning techniques. I want to understand and implement these Artificial intelligence Machine learning & Deep learning techniques in Medical & Space research so we can go where 'no man has gone before'. I am also a Full Stack Developer, highly skilled in Python, Java, C/C++, i.e, Object oriented programming, Database management & Web development.

#### FDUCATION

• Master's Degree in Computer Science - University of Texas, Arlington - Jan 2023

4.0/4.0 GPA

[Courses: Design & Analysis of Algorithms, Data Analysis and Modelling techniques, Computer Graphics, Database Systems, Advanced Database Systems-Cloud computing, Machine learning, Data Mining, Software Testing]

• Bachelor's Degree in Computer Science & Engineering - B.N.M Institute of Technology, Bangalore, India - June 2018

8.0/10 GPA

#### **SKILLS**

Languages- Python, C, C++, PowerShell, Java, C#, JavaScript, OpenGL,
Objective-C. Python Frameworks- TensorFlow, OpenAI, Weka, scikit-learn
Web technologies- HTML5, CSS, Bootstrap, PHP, Flask, React-Native, NodeJs
Cloud Technologies- AWS, Azure

Database Technologies- SQL, MySQL, Firebase, MongoDB
Software- Android studio, Visual studio, IIS, Jenkins, MATLAB,
Xcode
Version controllers- GIT, TFS
Operating Systems- Windows, Linux, iOS

### WORK EXPERIENCE

# Graduate Teaching Assistant, University of Texas at Arlington - CSE department

Aug 2021 - present

- Teaching assistant for Algorithms and Data structures course (CSE 3318) at UTA.
- · Duties: Conducting lab sessions, conducting exam reviews sessions, grading & proctoring exams, guiding students on their final projects.

#### Student Technology Assistant, University of Texas at Arlington - Office of Information Technology

May 2021 - Aug 2021

- Duties: Re-imaging devices, debugging any software/hardware related issues with all devices under UTA domain.
- Worked as a Technical consultant with UTA staff to build a core component of the solution in Python to interpret Service Now data and pull it in a
  desired format which is imported into the UTA database.

# Application Development Associate, Accenture Services Pvt. Ltd., India

Aug 2018 - May 2020

- Project: Presto Device Software, Fare Management System . Client: Metrolinx, Canada
- Achievements: Developed an automation tool to deploy application components on various internal servers. Integrated complete CI/CD pipeline for deployment using Jenkins. Reduced manual work from hours to seconds.
- · Awards: Awarded 'Emerging Star' during the first year of tenure in the project for said achievements. (Click to view certificate)

### Research Intern, The Old Dominion University, Norfolk, VA

Jul 2017 - Aug 2017

• Studied Alzheimer's and Dementia patients to help reduce patient on patient violence. Developed an Android app to notify the nurse for a changing sensor value from the android gear, worn by the patient. Achieved ~ 90% accuracy. Awarded 'Most Outstanding Interm' for demonstrating the best working prototype of the solution and also for exceptional technical, presentation & communication skills. (Click to view certificate)

### **TECHNICAL PROJECTS**

## Stock Market Analysis & Prediction using Machine Learning, B.N.M Institute of Technology, Bangalore, India

• Designed an ML model that predicts changing stock price of a company based on its historical prices over a period of five years, given the respective news articles post-closing time of the previous day and other globalisation factors. Employed Machine learning and Deep learning algorithms such as SVM, MLP to understand and predict the stock prices. Achieved ~ 80% accuracy.

## Aggression Detection in Alzheimer's & Dementia patients, The Old Dominion University, Norfolk, VA

• Designed an Android application for Alzheimer's and Dementia patients, to reduce patient on patient violence. Employed Android Studio (Java) application along with real-time data manager - Firebase to pick up gyroscopic values from the android gear worn by the patient and notify the nearest nurse if there is an anomaly in the recorded values with respect to their thresholds.

# Data analysis & data retrieval performance optimisation using Redis, University of Texas at Arlington

• A Flask application that analyses any data set, imports into SQL database on Azure cloud or MongoDB and with a web interface that allows users to query information from the data. Also measured performance & improved the application's performance using Redis.

# Multiplayer game using multiple AWS Cloud instances, University of Texas at Arlington

• Implemented a multi-user game using Flask. The application has a AWS - EC2 cloud instance for each player. Each player has a countdown timer and gets game data in real-time from the other cloud instances.

# Search engine using Azure Cloud services, University of Texas at Arlington

A Flask application that searches based on words or word combinations to find relevant documents that are on Azure cloud. The search result identifies a
document by name and where in that document that is found (such as line or offset). The application also processes the data for punctuations, stop words
and gives a very optimal search result. Achieved efficient search time complexity.

### Presto Device software, Fare management system - Metrolinx, Accenture Services Pvt. Ltd., India

• Roles: 1) **Technical Architect** - development & deployment of the software updates, for the Presto devices i,e, PRESTO CARDS which were RFID cards that were used as part of the fare management system in the Metrolinx vehicles. 2) **Release Manager & DevOps Engineer** – implementing and handling the complete CI-CD integration of creating builds and the deployment of these builds on the respective devices using Jenkins.

## Journey of a Space Shuttle using Computer graphics, B.N.M Institute of Technology, Bangalore, India

• Created a graphics simulation using OpenGl package, to study a space shuttle's journey. Employed OpenGl functions and created moving/stagnant graphic simulations using C++.

# **CLUBS AND ORGANISATIONS**

- Outreach Lead Google Developer Student Club Core Team at The University of Texas at Arlington.
- Social Media Manager Indian Mavericks Society at The University of Texas at Arlington.