

# SINDOORA RAVIKUMAR MURTHY

## Full Stack developer

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### CAREER OBJECTIVE

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.

### EDUCATION

- 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

<b>Languages-</b> Python, C, C++, PowerShell, Java, C#, JavaScript, OpenGL	<b>Database Technologies-</b> SQL, MySQL, Firebase, MongoDB
<b>Web technologies-</b> HTML5, CSS, PHP, Flask, React-Native, NodeJs	<b>Software-</b> Android studio, Visual studio, IIS, Jenkins, MATLAB, Xcode
<b>Cloud Technologies-</b> AWS, Azure	<b>Version controllers-</b> GIT, TFS
<b>Operating Systems-</b> Windows, Linux, iOS	<b>MS Office-</b> Word, Powerpoint, Excel, Visio

### WORK EXPERIENCE

- Graduate Teaching Assistant, CSE dept, University of Texas at Arlington** **Aug 2021 - present**
  - Teaching assistant for Algorithms and Data structures course (CSE 3318) at UTA, acquiring 50% tuition waiver.
  - 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 CD-CI 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. ([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
  - Awards: Awarded '*Most Outstanding Intern*' for demonstrating exceptional technical, presentation, communication skills and also for being the best dance performer. ([Click to view certificate](#))

### TECHNICAL PROJECTS

- Multiplayer game using multiple AWS Cloud instances, University of Texas at Arlington**
  - Implemented a multi-user game using Flask. The application has a AWS 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.

- 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.

- 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.

- Stock Market Analysis & Prediction using Machine Learning, B.N.M Institute of Technology, Bangalore, India**
  - Designed a new 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. Employed Machine learning algorithms such as SVM, MLP to understand and predict the stock prices.

- Aggression Detection in Alzheimer's & Dementia patients, The Old Dominion University, Norfolk, VA**
  - Designed an Android application using Machine Learning and Android app development for Alzheimer's and Dementia patients, to reduce patient on patient violence. Employed Android Studio (Java), Firebase to pick up gyroscopic values from the android gear worn by the patient and notify the same to the nurses. Successfully notified the nurse to monitor increasing aggression values from the patients' thresholds.

- 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++.