

# DEXSON JOHN D'SOUZA

[dexsondsouza@gmail.com](mailto:dexsondsouza@gmail.com) | 716-292-6836 | [LinkedIn](#) | [Portfolio](#)

## TECHNICAL SKILLS

**Languages:** Python, C++, Java, JavaScript, HTML, CSS, C#.

**Frameworks:** TypeScript, JQuery, Node JS, Angular 8, Express JS, React JS.

**Databases and Cloud:** MSSQL, MySQL, Oracle, Postgres, AWS (EC2, S3, Lambda, Gateway).

**Tools/Os:** Git version control, Jupyter, JIRA, Azure, Github, JSON, Visual Studio, Windows, Linux, Atlassian.

## EDUCATION

**Masters of Science in Computer Science**, Expected February 2023

*University at Buffalo, The State University of New York*

- Algorithms Design and Analysis, Operating System, Machine Learning, Algorithms for Parallel and Distributed Systems, Project Development, Modern Networking Concepts.

**Bachelors of Engineering in Information Technology**, May 2019

*Mumbai University*

- Object Oriented Programming(OOP), Software Engineering, Automata Theory, Data Mining, Soft Computing, Intelligent Systems, Image Processing, Computer Networks.

## EXPERIENCE

**Research Aide, SUNY RF, Buffalo, New York**, September 2021 - Present

- Assisted Professor Scott to create an iso-map of metalloids using Matlab9.1.
- Implemented a functionality to develop rankings of 10 metallic elements for a variety of randomly generated inputs.
- Generated correlations of elements with respect to Yield Strength and Ductility of 350 metalloids.
- Created scatter plots and line graphs to show % increase in YS and Ductility of each metal in different temperature range(below and above 800 degree celsius).

**Software Developer, Infinite Computing Systems, Mumbai**, July 2019 - July 2021

- Collaborated with a team of 5 members to build a Leave and Attendance system using Angular and NodeJs.
- Created several modules in a Mobile CRM application using Ionic and SQLite with a team of 10.
- Managed a Career portal web application and executed several functionalities in the front end.
- Remodeled queries to reduce execution time from an hour to 10 to 15 minutes.
- Designed and formulated a robust and strong backend scripting to design Dynamic forms using Javascript, SQLite and Ionic 5.
- Developed a micro service for authentication of users and to maintain 60 min session of users.
- Introduced a new option for tracking and locating 100's of work orders using Bing Maps.
- Analyzed requirement gathering, participated in testing and UI improvement.

## PROJECTS

**Stock Market Trading using Deep Reinforcement Learning**, November 2021 - December 2021

- Constructed a Model leveraging Reinforcement Learning techniques to perform trading on nvidia-2016.1 data.
- Formulated an environment to perform Q-learning consisting of 4 states and 3 steps required for Q-learning.
- Designed an RL agent to study trends and patterns in data and devise a trading strategy to increase it's account value by 40%.

**Diabetes Prediction using Machine Learning**, August 2021 - October 2021

- Implemented logistic regression from scratch. 77% accuracy was obtained using optimal hyper-parameters.
- Devised a Neural Network with 3 hidden layers with L2 and L1 regularization.
- Trained model with 50000 data samples. 82% accuracy was achieved.

**Classical Music classification**, January 2019 - April 2019

- Constructed a ML model to identify 4 different genres of classical music.
- Preprocessed and cleaned data for reducing inconsistency, incompleteness and errors in input data consisting of 300 audio files.
- Deployed RNN algorithm to train model and achieve 89% accuracy.