

## DHARAM THILAK REDDY

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### EDUCATION

**Master of Science in Computer Science, University at Buffalo, The State University of New York** **GPA: 3.5 Jan 2024\***

*Relevant Courses:* Analysis of Algorithms, Pattern Recognition, Information Retrieval, Data Modelling & Query Languages, Reinforcement Learning, Data Intensive Computing, Human Computer Interaction

**B.Tech. CSE, Jawaharlal Nehru Technological University, Hyderabad, India**

**GPA: 8.09/10 Aug 2021**

*Relevant Courses:* Data Mining, Design and Analysis of Algorithms, Database Management Systems, Operating Systems, Computer Networks, Big Data Analytics, Cloud Computing, Web Technologies, Compiler Design

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### TECHNICAL SKILLS

**Languages and Web Technologies:** C/C++, C#, Java, Python, SQL, JavaScript, Kotlin, Swift, Dart, HTML, CSS, Bootstrap, React.js, Node.js, Rest API

**Tools and Frameworks:** Git, Visual Studio, Android Studio, Selenium, AWS, Django, Flask, Flutter, Postman

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### WORK EXPERIENCE

**Software Developer, Hexagon Capability Center India, Hyderabad, India**

**Aug 2021 - Aug 2022**

- ✦ Optimized search engine for searching member systems in Intergraph application.
- ✦ Built WPF pages for custom commands and is being accessed by more than 50k customers.
- ✦ Migrated, deployed, and integrated 3D objects to be accessible in cross-platform devices.

**Software Development Intern, Exposys Data Labs, Hyderabad, India**

**April 2021 – June 2021**

- ✦ Improved workflow by adding user-friendly and responsive design of a Video chat Web-App.
- ✦ Analyzed and created virtual backgrounds, log-in authentication, and screen recording features.
- ✦ Improved efficiency when multiple people are joined in a group call.

**Teaching Assistant, JNTU, Hyderabad, India**

**July 2020 – Oct 2020**

- ✦ Guided fellow Juniors in programming languages (Python, C++, and JavaScript)).
  - ✦ Instructed HTML, CSS, JavaScript on web technologies workshop in a 16-week program.
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### ACADEMIC PROJECTS

**Data Augmentation using DCGANs (Skills: Python, Machine Learning, CNN)**

**Dec 2020 – May 2021**

- ✦ Designed a simple model generating similar images using Deep Convolutional Generative Adversarial Networks helps in enhancement of datasets.
- ✦ Consists mainly of two phases: Generator and Discriminator. The generator uses LeakyReLU, Batch Normalization 2D and Discriminator uses the Sigmoid function to get decision output.

**Deep Reinforcement Algorithms (Skills: Python, Neural Networks, Reinforcement Learning)**

**Jan 2023 – May 2023**

- ✦ Deep Q-Networks (DQN), Double DQN (DDQN), Actor Critic, Advantage Actor Critic Algorithms were implemented to solve custom Multi-Agent environments such as Tic-Tac-Toe, Rock Paper Scissors and Switch Game.
- ✦ Developed a custom model using modern techniques such as experience relay methods to boost performance of existing algorithm eventually achieving accuracy over 92%.

**SonarScore: Advanced Music Trend Forecasting (Skills: Python, Flask, Regression, Clustering)**

**Sep 2022 – Dec 2022**

- ✦ Orchestrated application of various Machine Learning algorithms, encompassing regression, clustering, and classification techniques, to prognosticate song popularity.
- ✦ Designed an interactive Web-App for users to play with custom input features such as Energy, Loudness, and Speechiness ultimately helping in predicting song's popularity gaining an accuracy over 88%.