

# Anish Rao Toorpu

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## EDUCATION

### North Carolina State University, Raleigh NC, USA

August 2023 - May 2025

#### Master of Computer Science

GPA: 4.0/4.0

**Coursework:** Neural Networks and Deep Learning, Design and Analysis of Algorithms, Software Engineering, Automated Learning and Data Analysis, Object Oriented Design & Development, User Experience, Operating systems.

### Anurag University, Hyderabad, India

August 2019 - July 2023

#### Bachelor of Technology in Artificial Intelligence

GPA: 8.66/10.0

**Coursework:** Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, Software Engineering, Machine Learning, Deep Learning, Neural Networks, Natural Language Processing.

## TECHNICAL SKILLS

**Languages:** C, C++, C#, R, Java, Python, JavaScript, SQL, Swift, MATLAB, Ruby, TypeScript, Perl, Go(GoLang)

**Web Technologies:** HTML, CSS, React, Angular, Django, Flask, Express, Node.js, GraphQL, REST, AWS

**Databases:** MySQL, Firebase, Oracle, MongoDB, NoSQL, PostgreSQL, Snowflake

**Tools/Frameworks:** Git (GitHub, GitLab), Keras, TensorFlow, Ruby on Rails, Vue.js, Jenkins, Spring Boot

**Others:** Apache Spark, DataBricks, Visual Studio, R-Studio, Linux, Unix, Docker, Tableau

## EXPERIENCE

### Graduate Student Assistant, North Carolina State University

May 2024-Present

- Leveraged **Python** to perform comprehensive **Data Analysis** to deliver actionable insights on projects focused on Student Mental Health Data and Transfer Student Preparedness that informed program improvements.
- Designed and launched the program's website using WordPress to catalog professional development training and integrated it with the course registration system, and provided support in instructional design.

### Software Engineer Intern, North Carolina State University

September 2023-May 2024

- Developed and implemented an **Advanced Anomaly Detection System** for NCSU BTEC Water Treatment Facility using LSTM neural networks, enhancing operational efficiency by 40%.
- Engineered secure token retrieval and enhanced **GraphQL** request handling, improving data security and reducing data retrieval issues by 30%.
- Designed visualization tools and automatic email notifications, facilitating proactive operational management and timely responses to anomalies, resulting in a **25%** improvement in system reliability.

### Software Engineer Intern, Cognizant

February 2023-June 2023

- Pioneered the development and successful implementation of loan management applications using the **Pega** low code platform, leading to a remarkable **30%** boost in operational efficiency.
- Actively collaborated with cross-functional teams to swiftly identify and expertly resolve bugs and issues within the loan management applications, yielding a noteworthy **20%** reduction in customer complaints.
- Leveraged Pega's low code platform to craft and deploy automated workflows, resulting in substantial time and cost savings, thus enhancing company productivity.

### Data Science Intern, SkillVertex

February 2022-April 2022

- Conducted in-depth **Exploratory Data Analysis (EDA)** and executed precise Feature Engineering on diverse datasets.
- Acquired foundational expertise in constructing machine learning models from the ground up and adeptly fine-tuned parameters to achieve targeted outcomes.
- Applied advanced statistical techniques during Exploratory Data Analysis (EDA) and leveraged Feature Engineering to enhance data quality, contributing to a substantial **35%** increase in predictive model accuracy.

## ACADEMIC PROJECTS

### WolfEvents Event Management System

- Developed a comprehensive event management system using **Ruby on Rails**, allowing users to manage events, book tickets and leave reviews.
- Implemented functionalities for both admin and attendees, including event creation, ticket booking, attendee management, and review systems, resulting in a **25%** increase in user engagement and satisfaction.
- Integrated bonus features such as filtering attendees by event name and allowing users to book tickets for other users.

### Data Query System

- Spearheaded the development of a streamlined data query system, facilitating efficient access to student information from existing event records.
- Implemented a robust solution utilizing **Node.js** for backend operations and **React** for frontend interactions, seamlessly integrating a **MySQL** database for effective management and analysis of extensive student and event data.

## ACHIEVEMENTS

- Secured the 13th position in a three-day Coding Competition conducted by a university-level club in collaboration with Code Chef.
- Achieved the 7th position in the Data Hack Hours Hackathon, a prestigious event organized by the Data Literacy and Visualization Wing in partnership with the CSI - Hyderabad chapter.