

RITHVIK DHANPAL

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EDUCATION:

Montclair State University (MSU), Montclair, NJ

Master of Science in Data Science

Expected Graduation Dec 2025

Relevant Coursework: Advanced Database, Statistics for Data Science, Data Structures and Algorithms,

Data Mining, Big Data Analytics, Computer Algorithms & Analysis, Machine learning

CGPA: 4.0/4.0

St. Martin's Engineering College, India, Hyderabad

Aug 2021

Bachelor of Technology in Electrical and Electronic Engineering

GPA: 3.3/4.0

TECHNICAL PROFICIENCIES:

- **Programming Languages:** Java/J2EE, Python, TypeScript, JavaScript, HTML, CSS, R
- **Tools & Platforms:** MySQL, Git, SVN, Docker, Jenkins, Visual Studio Code, Eclipse, Tomcat, Spring, Spring Boot, React, Angular JS, Redis, Solr, Cassandra, Google Colab, Databricks, Linux/Unix
- **Other Skills:** Distributed Systems, Web Development, Data Structures, Algorithms, CI/CD Pipelines, Scalable Systems, Cloud Platforms (AWS), Hadoop, Spark, Map-reduce

WORK EXPERIENCE:

Center for Academic Success and Tutoring (CAST), MSU

Oct 2024 - Present

Graduate Peer Tutor & Supplemental Instructor (Python, Java and Applied Calculus Programming)

- Provide tutoring support for CSIT courses, including Python programming.
- Provide one-on-one tutoring for CSIT courses, including Python, Java, Data Structures, Web Development, and Database Systems.
- Assist students with problem-solving exercises, debugging, and clarifying doubts to improve their understanding of key concepts.
- Serve as a Supplemental Instructor for Python, guiding students through programming challenges and assignments.

Optical Health Solution Pvt Ltd (Medplus), Hyderabad, IN

Jun 2022 - Dec 2023

Full Stack Application Developer (Associate Software Engineer)

- Developed applications, micro-services using Java/J2EE, Spring, and various frontend frameworks.
- Worked in the **User Management team**, developing access control systems for various internal applications.
- Contributed to the development of Medplus **e-commerce platform** for medicines, overseeing front-end to back-end integration.
- **Developed APIs** for multiple applications, facilitating efficient communication between systems and applications within Medplus.
- Maintained and developed applications for diagnostics, finance, and optical services.
- Utilized Java/J2EE, Spring Boot, React, and Angular for application development, and implemented CI/CD pipelines using Docker and Jenkins.

Office of Student Belonging (OSB), MSU

Oct 2024 - Oct 2024

Student Production Assistant

- Organized and managed orientation activities and events for new students, promoting engagement and a welcoming environment.
- Collaborated with team members to facilitate smooth operations during orientation weeks.

PROJECTS

- **Customer Churn Prediction Project**
Developed machine learning models (Logistic Regression, Random Forest, kNN, Decision Tree, Boosted Tree, Naive Bayes, ANN) to predict customer churn in telecom data. Optimized features and improved model performance through data preprocessing and hyperparameter tuning. Achieved 85% accuracy using Python and scikit-learn.
- **Food Inspection Analysis Using Association Rule Mining (Data Mining)**
Applied the Apriori algorithm to uncover associations between inspection results, facility types, and risk levels using data from the City of Chicago Data Portal. Generated association rules to identify frequent patterns and insights for improving food safety.
- **PCOS Detection & Analysis (Statistics for Data Science)**
Developed a logistic regression model to predict PCOS (Polycystic Ovary Syndrome) and implemented a Flask-based web app for early diagnosis.
Conducted data preprocessing, feature selection, and performance evaluation to optimize the model's accuracy.
- **Fremont Bridge Bicycle Data Analysis (Big Data Analytics)**
Analysed trends in bicycle crossings using weekly trends, rolling means, and Gaussian smoothing techniques.
Utilized Jupiter Notebook for data analysis and visualization.
- **E-commerce Website Development (Medplus)**
Built a full-stack clothing e-commerce site using Java/Spring Boot and React, with front-to-back integration.
Integrated features such as product listing, shopping cart, and order processing.

ACHIEVEMENTS

- Successfully maintained a 4.0/4.0 CGPA while managing multiple professional roles.
- Tutored over 100 students across various computer science disciplines, boosting performance metrics by 20%.