# Meghana Tummala

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https://mysurveyhw2.s3.amazonaws.com/index.html

## **PROJECTS**

#### **University Survey Form Enhancement**

https://mysurveyhw2.s3.amazonaws.com/survey.html · February 2024 - March 2024

- Revamped a standard university survey form into an interactive, user-friendly web application. Implemented advanced features to enhance user engagement and data accuracy.
- · Introduced a personalized greeting system utilizing cookies, dynamically adjusting messages based on the local time of day.
- · Implemented Ajax-based real-time validation and auto-fill for zip codes, reducing user effort and improving data integrity.
- · Crafted an intuitive form validation mechanism to ensure data quality and user compliance with input standards.

## **Containerized Web Application Deployment**

February 2024 - March 2024

- · Technologies used: Docker, Kubernetes, Jenkins, Apache Tomcat.
- $\boldsymbol{\cdot}$  Developed a scalable deployment pipeline for a Java web application.
- · Utilized Docker for containerization, ensuring consistent environments across development, testing, and production stages.
- · Orchestrated deployments using Kubernetes, achieving high availability and scalability of the web application.
- Automated build and deployment processes through a CI/CD pipeline using Jenkins, integrated with version control (GitHub), enhancing operational efficiency.

## Full-Stack Application Development for University Survey System

March 2024 - April 2024

- Developed a full-stack web application using Angular and Spring Boot to collect and manage student survey data, enhancing university decision-making processes.
- · Engineered responsive UI components including a welcome page, survey form, and survey viewer.
- · Implemented RESTful APIs for seamless data interaction between the front-end and back-end, utilizing JSON for efficient data handling.
- · Enabled persistent data storage with JDBC/JPA to manage submissions of survey forms and retrieval of recorded surveys.

## **Waste Management Rewards Platform**

- · Developed an interface between users and waste management processes, providing reward points as incentives for proper waste disposal.
- · These points can be redeemed as actual money or as discounts at users' favorite cafes and restaurants, promoting sustainable consumption.
- The techstack used in the project includes Arduino, Raspberry Pi, HTML, CSS, Bootstrap and Javascript, Python Django Framework, OpenCV and PyAutogui, and SQL.

#### Used HTML and CSS to recreate a Netflix-like website in under one hour

• Utilized HTML and CSS skills to rapidly recreate a visually appealing and user-friendly website in under one hour, closely emulating the design and functionality of a Netflix-like platform.

#### Created a Chatbot using Python

## **Research Publication**

- https://doi.org/10.1515/9783111398549-013
- Published a book chapter on "Advancements and challenges of using natural language processing in the healthcare sector" from the book Digital Transformation in Healthcare 5.0 in Berlin, Boston: De Gruyter, 2024.

#### **EDUCATION**

#### **Masters in Computer Science**

George Masosn University • Fairfax, Va • 2025 • 3.67

#### **Bachelors in Computer Science**

SRM University, AP · Andhra Pradesh, India · 2023 · 8.74

#### **CERTIFICATIONS**

## Fellow at NxtWave CCBP Academy

Gold Medal at "Research Day" competition

SRM University • 2023

## 2nd runner up, UPES CSI Hackathon

2.02.2

## **SKILLS**

Python, Java, JavaScript, AWS S3, EC2, Docker, HTML&CSS, Bootstrap, Angular-2, Spring Boot, RESTful Web Services, JDBC/JPA, JSON/Ajax Ubuntu/Linux, Mac, Windows