# Mahitha Pillodi

# **EDUCATION**

## University of Wisconsin Madison | MS in CS

Sept 22 - Dec 23 (CGPA: 3.92/4)

Courses: Distributed Systems, Computer Vision, Intro to AI, Machine Learning, Human-Computer Interaction

VNR Vignana Jyothi Institute of Engineering& Technology | BTech in CS Aug 16 - Sept 20 (CGPA: 9.45/10) Courses: DS & Algorithms, Design Analysis & Algorithms, Operating Systems, Database Management Systems, Linux

#### TECHNICAL SKILLS

Languages: C, C++, Java, Python, HTML, CSS, JavaScript, TypeScript, MySQL, Data Structures & Algorithms Frameworks & Libraries: Java Spring, Springboot, Flask, Angular, React, Bootstrap, NodeJS, Keras, Tensorflow, Numpy, Pandas, Matplotlib

Tools: Kubernetes, Git & GitHub, Jenkins, Jupyter, Splunk, Microsoft ADFS, Android Studio, SQL Developer, Kafka Methodologies: Agile Scrum, Test-Driven Development, DevOps

## WORK EXPERIENCE

## Teaching Assistant, University of Wisconsin Madison

Jan 23 - May 23

• Worked as a Teaching Assistant for CS320 Advanced Data Science Programming using Python for Spring 2023.

## Project Assistant - Grader, University of Wisconsin-Madison

Sept 22 - Dec 22

• Worked as a course grader for CS220 Data Science Programming using Python for Fall 2022.

## Software Engineer II, JPMorgan Chase & Co

Aug 20 - July 22

- Designed and implemented **RESTful APIs** of a critical application that is used across many applications in JPMC for client and facility information using **Java Spring**, **Swagger** as a back-end, and Angular for UI.
- Organized and maneuvered production releases. Delivered new feature enhancements, fixed production defects of a legacy application, and improved the code coverage to 80%.
- Provided customer in-depth technical support, addressed critical **production issues** through root-cause analysis to mitigate the client impact, and streamlined the strategic remediation plan under tight deadlines.
- Followed Agile Scrum Methodologies, Software Development life cycle, and Test-Driven Development and worked on several DevOps tools such as Jira, Bitbucket, Jenkins 2.0, and Sonar. Modeled the CI/CD pipeline for automated deployment of applications in a cloud environment.

# Software Engineer Intern, JPMorgan Chase & Co

Jan 20 - Aug 20

- Modernized an internal customer web application using HTML5, CSS, Bootstrap, Angular, TypeScript, and Flask.
- Developed microservices to automate the remediation of several break-fix processes in the team using Python, Flask.
- Planned and executed the cloud migration and maintenance of web applications on the Gaia Kubernetes Platform.

## Android Developer Intern, ZF Technologies

Aug 18 - Nov 18

• Built an Android application using Java, XML, Android SDK, and Android Studio. The Android app is used by the employees and management to train the recruits on AUTOSAR Technology.

# **PROJECTS**

# Exploring Data Augmentation Techniques and Improving Object Detection Performance

• Used **Stable Diffusion** and **Generative Adversarial Networks** to create synthetic images that closely resemble those in the COCO dataset. The effectiveness of the synthetic images was evaluated by combining them with the original images and using them as input for the object detection model **YOLOv5**.

# Multimodal Emotion Recognition (MER) Systems

• Implemented a Multimodal Emotion Recognition Model using Python Libraries such as Numpy, Tensorflow, Keras, Pandas, matplotlib, and Deep Neural Networks such as **Time-Distributed Convolutional Neural Networks and Convolutional Neural Networks** on RAVDESS and FER 2013 datasets to recognize human emotions with audio and video as input.

## **ACHIEVEMENTS**

- Received SEP Recognition scroll in Q2 2020 for my contribution to my initiatives, going above and beyond Business as Usual operations in JPMC.
- Published a survey paper on Multimodal Emotion Recognition (MER) Systems in ICACECS 2020 conference indexed by Springers International.
- Winner at the India Code For Good Challenge 2019, a TechForSocialGood Hackathon organized by JPMC.