

MAMATHA YARRAMANENI

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EDUCATION

Master of Science: Computer Science and Engineering, Expected Dec 2023, CGPA: 3.9/4.0

University at Buffalo, The State University of New York

- Coursework: Data Models and Query Languages, Analysis of Algorithms, Natural Language Processing, Data Intensive Computing, Introduction to Machine Learning

Bachelor of Technology: Computer Science and Engineering, June 2021, CGPA: 8.80/10.0

SASTRA University, India

- Coursework: Data Structures and Algorithms, Database Management Systems, Cloud computing

TECHNICAL SKILLS & TOOLS

Programming: C++, Typescript, Java, Python, Javascript

Database: PostgreSQL, SQL, MongoDB

Web Development: React, Angular, Spring Boot, NodeJS, ExpressJS, HTML, CSS

Other Skills: Git, Docker, DevOps, Full Stack Development, Flutter, Mobile Application Development, Google Cloud, Visual Studio

WORK EXPERIENCE

Graduate Teaching Assistant, University at Buffalo, Buffalo, NY: January 2023 – Present

- Assisted professor with grading and clarified students' doubts and tracked their progress for the course CSE 4/560 - Data Models and Query Languages

Associate Software Engineer, Navis, Chennai, India: July 2021 – August 2022

- Worked on the Full Stack Application Development using Angular and Spring Boot incorporating Functional Programming and Test Driven Development.
- Improved the CI/CD pipeline of the automation script for the data population of the demo environment by 60% along with Jenkins triggers to deploy the git branch to Kubernetes.
- Integrated the team's project with microservices and other products using REST and SOAP API calls by developing Groovy scripts.
- Increased teams' productivity by 70% by developing PostgreSQL stored procedures, and Jest unit tests.

Associate Software Engineer Intern, Navis, Chennai, India: February 2021 – June 2021

- Reduced the manual data updating by 90% by building an automation script for data population in existing microservice using Node JS and Typescript.
- Improved the accuracy of the application functioning by 60% by developing Jest unit test cases.
- Learned strategies of Test Driven Development and Functional Programming using TypeScript and Java.

Teaching Assistant, Pupilfirst, India: January 2020 – June 2020

- Reviewed students' assignments and assisted them with learning, debugging, and suggesting changes to their code. Gained knowledge about SaaS applications development and Ruby On Rails with the coach's assistance.

PROJECTS

Clickbait Spoiling, University at Buffalo: Natural Language Processing, Transformers, Python

- Collaborated and constructed a model to classify and summarize the spoilers for clickbait posts. Information Retrieval, Neural, and Transformers models like BERT, DeBERTa, and RoBERTa were used for test classification, passage retrieval, and question-answering models.

Hospital Data Management System, University at Buffalo: ReactJS, NodeJS, ExpressJS, and PostgreSQL

- Engineered a database system by designing, and developing a robust model for hospital datasets using Indexing, Triggers, and Stored procedures. Coded a full stack application using PERN stack.

Twitter Hashtag Analysis, SASTRA University: Hadoop, MapReduce, Google Cloud, Java

- Developed a pipeline to generate the top 10 trending hashtags on a dataset collected from Twitter streaming API. Implemented a Hadoop MapReduce script on the Dataproc service of the Google Cloud Platform.

Chronic Kidney Disease prediction system, SASTRA University: Python, Machine Learning

- Built a robust diagnostic model for the chronic kidney disease dataset collected from the UCI repository. Bagging and Random Subspace Ensemble methods were adapted to develop the model.

Home Services Application, SASTRA University: Android Studio, Firebase

- Incorporated software engineering principles to generate a mobile application that acts as a platform for home services. Android Studio and Firebase were used to accomplish the running pipeline for the workflow.

AWARDS & INVOLVEMENT

- Participated in **Women in Tech Western NY 2023** event and gained insights from women technologists of NY.
- **Speaker for the workshop** on *Version Control using Git*, University at Buffalo, February 2023
- **RAMP Emerging Leader Award** for Better Together, Navis - December 2021
- **Dean's Merit Scholarship Awardee**, SASTRA University - 2017-18