SAI MANASA VEDANTAM

Email: vedantamsaimanasa@gmail.com   **LinkedIn:** Sai-Manasa-Vedantam

Phone: +1 (440)949-0107   **Github:** Sai-Manasa-Vedantam

EDUCATION

Master of Science in Computer Science   **Jan 2021 – Dec 2022 (Expected)**

University of Texas, Dallas (UTD)   4.0 GPA

Bachelor of Technology in Computer Science & Engineering   **Jan 2015 – May 2019**

Jawaharlal Nehru Technological University, Kakinada   3.8 GPA

TECHNICAL SKILLS

Programming Languages	Java, Python, C, C#
Web Development	HTML, XML, CSS, JavaScript, ReactJS, JQuery
Database Technologies	MySQL, MongoDB
IDEs	Eclipse, Visual Studio
Frameworks	Flask, ASP.NET MVC, Apache Spark, Django
Intelligent Technologies	Machine Learning, Artificial Intelligence, Natural Language Processing

PROFESSIONAL EXPERIENCE

Software Developer at Hexagon Capability Center, India   **June 2019 – June 2020**

- Implemented front-end of the application with HTML, CSS, Bootstrap, Typescript, ReactJS & back-end using ASP.NET in MVC architecture & Redux promises for data retrieval with RESTful API calls for responses.
- Developed xUNIT test cases for code coverage & experienced in Test-driven Development.
- Deployed application using Microsoft Azure DevOps conforming to SDLC, Agile, Scrum and best principles of software design.
- Experienced in working with Redux architecture using complex Object-oriented concepts.

ADDITIONAL EXPERIENCE

- Working as a Grader in Computer Science Department at UTD   **Sept 2021 – Till Date**
- Tutor in Computer Science Outreach Program at UTD   **June 2021 – Sept 2021**
- Freelance educator on Unacademy   **Mar 2018 – Till Date**

PROJECTS ACCOMPLISHED

Question-Answering System using NLP (Python, GIT, Jupyter Notebook)

- A closed-domain QA system that uses Natural Language Processing techniques to answer What, Who & When type questions based on Stanford Question Answering Dataset (SQuAD).

Bridal Boutique (HTML, JS, CSS, Python Flask, Jquery, Bootstrap, SQL, GIT)

- Responsive shopping website that sells bridal clothes & accessories which allows user to wish list items, book appointment, filter, search through pages etc. along with admin privileges.

Heart Disease Prediction System using Machine Learning (Python)

- Using predictions of three ML algorithms namely Naïve Bayes, Logistic Regression and Support Vector Machines, it predicts the probability of getting attacked by heart disease in near future.

Student Counseling System (JS, HTML, CSS, XAMPP, PHP, RESTful calls)

- Aimed to reduce redundant paperwork each time the student promotes to next class. Automates complete system with few updates to the data twice per year.

Analyze User Experience based on Human Computer Interaction (WinForms, C#)

- While many concentrates on User Interface, this project builds an application & analyzes both UI and User Experience using standard metrics, statistical tools & best practices.

Expert Systems solution for Disease prediction with Big Data Management & Natural Language Processing (Python, HTML, CSS, Bootstrap, JS, Django, Jupyter Notebook)

- Utilizes the potential of Big Data Management & Analytics along with Machine Learning & Natural Language Processing which belong to the branch of Expert Systems to suggest the likeliness of having top 10 diseases using a GUI to read the symptoms a person is experiencing & visualize the results.

Point-annotation based Crowd counting & Detection with Deep Neural Networks (Google Colaboratory, Python, Neural Networks)

- Builds a model that performs crowd counting & detection using Point annotations on heads by addressing the issues with existing systems that are incapable of performing the same at a time.

Analysis and Visualization of Tweets in Real-Time with Apache Kafka & Apache Spark (Python, Kafka, Kibana, Elastic Search)

- Builds an end-to-end pipeline to read tweets, process them & perform sentiment analysis on the same and visualize the observations in real-time using Kafka, Spark & Kibana, followed by K-means clustering for result & convergence analysis.

Real-time Video Processing Application using LitmusRT (C, LitmusRT, SDL, FFMPEG, liblitmus, Ubuntu)

- Implements a Video player that avoids lags & ensures high quality of service by scheduling tasks in real-time using the bundle of real-time interfaces provided by LitmusRT, SDL & FFMPEG followed by visualization with tracing tools.

CERTIFICATION AND PUBLICATIONS

- Data Science with R. **Simplilearn**
- Development with TypeScript. **Udemy**
- Unit Testing with xUnit & MOQ. **Udemy**
- Azure DevOps for Developers. **Udemy**
- Ethical Hacking and Information Security. **Internshala**
- Published articles on DNA DATA STORAGE and DIGITAL FORENSICS. **University Journal**