

SAI MANASA VEDANTAM

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EDUCATION

Master of Science in Computer Science

University of Texas, Dallas (UTD)

Jan 2021 – Dec 2022

4.0 CGPA

Bachelor of Technology in Computer Science & Engineering

Jawaharlal Nehru Technological University, Kakinada

Jan 2015 – May 2019

3.8 CGPA

TECHNICAL SKILLS

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

PROFESSIONAL EXPERIENCE

Summer Analyst at Goldman Sachs (Dallas, TX)

Jun 2022 – Aug 2022

- Implemented the dynamic responsive web application by integrating Angular with Bootstrap, further with web services that use Sybase ASE data store
- Involved in various phases of SDLC like requirements gathering, design, development & analysis of the system specifications of a SOA driven application, which is used extensively by the firm
- Migrated the legacy system to a cutting-edge system with upgraded tech stack and enhanced features following Agile methodology
- Developed unit test cases using Jest to improve code coverage & performed integration testing on the application to validate the functional workflow

Software Developer at Hexagon Capability Center (India)

Jun 2019 – Jun 2020

- Implemented front-end of the application with ReactJS, Typescript, Bootstrap, CSS & back-end using ASP.NET MVC to consume REST endpoints
- Experienced in working with Redux architecture using complex Object-oriented concepts & extensively used Redux promises in the application
- Developed xUNIT test cases for code coverage & experienced in Test-driven Development
- Worked in Agile development environment with frequently changing business requirements

ADDITIONAL EXPERIENCE

- Grader in Computer Science Department at UTD
- Tutor in Computer Science Outreach Program at UTD
- Freelance educator on Unacademy

Sep 2021 – Jun 2022, Aug 2022 – Dec 2022

Jun 2021 – Sep 2021

Mar 2018 – Jun 2020

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, ML Algorithms)

- 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 a student promotes to next class, automates complete system with few updates to the data

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

- While many works concentrate on building 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 (Python, HTML, CSS, Bootstrap, JS, Django, ML)

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

Point-annotation based Crowd counting & Detection with Deep Neural Networks (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

Real-time Analysis & Visualization of Tweets (Python, Kafka, Kibana, Elastic Search, Spark)

- 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 Player with 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

Database design for a Food Delivery System (SQL, Dependency & EER Diagrams, Lucid)

- Analyzes the requirements of a food delivery system and proposes an efficient database design normalized in 3NF and explains each stage of the database design process & demonstrates querying the system ranging from simple to complex queries

Differential Privacy enforced Motif detection with Gibbs' Sampling (Python, Jupyter Notebook)

- Understands the real-time challenges associated with data mining applications and implements differential privacy on the data before knowledge extraction from DNA sequences and detects motif in the given set of DNA sequences with Markov Chain Monte Carlo method named Gibbs' sampling.

CERTIFICATIONS AND PUBLICATIONS

- Natural Language Processing with Classification and Vector Spaces
- Data Science with R
- Development with TypeScript
- Unit Testing with xUnit & MOQ
- Azure DevOps for Developers
- Ethical Hacking and Information Security
- Published articles on DNA Data Storage and Digital Forensics

Coursera
Simplilearn

Udemy

Udemy

Udemy

Internshala

University Journal