NEHA REDDY BOGIREDDY

(703) 342-2708) bnehar3010@gmail.com

EDUCATION

George Mason University

Fairfax, Virginia, USA

Aug 2022 - May 2024

- Masters in Computer Sciences, GPA: 3.4/4
- Relevant Coursework: Software Engineering for the WWW, Database Management, Software Testing, Data Mining

Mahindra University

Hyderabad, Telangana, India

Aug 2018 - Jun 2022

- B.Tech in Computer Science and Engineering, GPA: 8.72/10
- Relevant Coursework: Data Structures and Algorithms, Software Architecture, Object Oriented Programming, NLP

SKILLS

- Programming Languages: Java, Python, GoLang, JavaScript
- Web Development: HTML, CSS, ReactJS, Node.js, Bootstrap, MongoDB, Express, Next.js, React Native, Tailwind CSS.
- Tools and Frameworks: SQL, Figma, Docker, Oracle, Tensorflow, NLTK, Jupyter Notebook, Google Colab.
- Data Analysis and Visualization: Pandas, NumPy, Matplotlib, Seaborn.
- Others: Swift, Android App Development, Git, Windows, Linux

PROFESSIONAL EXPERIENCE

Research Assistant

Humor In Times of COVID-19

Jan 2021 - April 2023

- Compiled a diverse dataset with over 1500 data points for enhancing humour sentiment analysis across categories and target demographics, to emphasize crisis adaptability notably during the COVID-19 pandemic.
- Leveraged Python, TensorFlow, and NLTK to develop and fine-tune the model that achieved 80-85% accuracy.
- Extracted and analysed over 10,000 tweets and Reddit posts, facilitating pandemic-specific insights. Engaged annotators for dataset labeling, and employed GPT-3 and Roberta models for sentiment and usage pattern analysis.
- Managed a team of 10, ensuring timely milestones employing tools such as GoogleColab, Overleaf, and Microsoft Teams.
- Published a research paper detailing innovative findings and conclusions at SocialNLP @ TheWebConf2023, significantly enhancing the accessibility and impact of research data for over 500 industry professionals.

Front-end Developer

Mahindra University, Hyderabad

July 2019 - May 2020

- Designed and built user-friendly University's Fest website, increasing user engagement by 15-20%.
- Enhanced user experience by improving registration completion rates by 20-25% by optimizing registration portals.
- Reduced page load time by using Bootstrap, HTML, CSS, and JavaScript for efficient design and integration with backend APIs.

PROJECTS

Little Lemon Restaurant Web App

Capstone Project

July 2024

- Built a fully functional React-based web application for a restaurant, demonstrating skills in front-end development, state management, and API integration.
- Utilized semantic HTML, CSS grids, and Figma for UX/UI design, and implemented a dynamic booking system with thorough unit testing and Git version control.

SleepyHollow Database Application

May 2024

- Created a comprehensive end-to-end database application for a gym equipment sales company as part of an employee recognition program.
- Implemented a 3-tier enterprise model, including an Android mobile application integrated with Java server-side code.

Notes App February 2023

- Designed a simple notes application using Swift for iOS devices, resulting in increase in user productivity.
- The app allows users to create, edit, and delete notes, with a user-friendly interface for easy note management.

Maze Navigation with Q-Learning

December 2023

- Engineered an agent to navigate mazes with static and dynamic obstacles using Deep Q-Learning and the Actor-Critic Algorithm.
- Utilized DQN models with hidden layers and an output layer for state-action values, enhancing state value evaluation.
- Achieved a 40% reduction in navigation time demonstrating the effectiveness of the solution in real-world scenarios.

ADDITIONAL ACHIEVEMENTS

- Scholarship: Awarded a scholarship for academic excellence during BTech.
- Guided 10 freshmen, coordinating weekly orientation activities and organized literature events for the university fest.
- Girl's Soccer team: Founding member and defender, leading the team to victories.