INTURI BHARATH SAI

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OBJECTIVE

Passionate software student eager to apply theoretical knowledge and practical skills to real-world projects. Seeking opportunities to contribute to innovative solutions and grow within a collaborative environment.

EDUCATION

B.TECH in Computer Science with Specialization in AI and ML - 8.16 (CGPA) **August 2021 - Present***
Vellore Institute Of Technology(Amaravathi- Campus)
Intermediate [MPC] - 84.6% **June 2020 - July 2021**
Sri Gayatri Junior College,Vijayawada
Secondary School Certificate - 8.0 (CGPA) **June 2018 - May 2019**
Nirmala High School, Vijayawada

SKILLS

- **Programming Languages:** Python, Java, PHP, JavaScript.
- **Database/Query Language:** SQL, MySQL, MongoDB.
- **Web Development:** , HTML, CSS, Mern Stack.
- **Machine Learning:** Supervised Learning, Unsupervised Learning, Deep Learning, Reinforcement Learning.
- **Tools:** Power BI, Microsoft Word, Excel, and PowerPoint.
- **Communication skills:** Strong Verbal and Written Communication.

TRAINING/CERTIFICATIONS

- AWS Certified Cloud Practitioner (AWS CCP) - Industrial Foundation Certificate Click Here
- Ethnus - Mern Full Stack Internship- MERN Industrial Global Certification Click Here
- Office Master - Workshop on Power Bi Click Here
- NVIDIA - Fundamentals of Accelerated Computing with Python Click Here
- NVIDIA - Fundamentals of Deep Learning Click Here
- NVIDIA - Applications of AI for Predictive Maintenance Click Here
- NVIDIA - Building Transformer-Based Natural Language Processing Applications Click Here

PROJECTS

Title: IoT Security Measures for Smart Home Automation Systems Click Here

- Proposed a secure IoT authentication framework using **Elliptic Curve Cryptography (ECC)**. Focused on anonymous identity management, mutual authentication, and replay attack prevention to ensure privacy, data integrity, and protection against unauthorized access in smart home automation.

Title: Soil Moisture Tester Click Here

- Designed and implemented a functional Soil Moisture Tester using **Raspberry Pi**, **Python**. This project holds significant importance in agricultural contexts, offering farmers and gardeners immediate and precise insights into soil moisture levels. By enabling real-time monitoring and analysis, it aids in optimizing water usage and improving crop yields.

Title: Artificial Sight with Ultrasonic Sensor Click Here

- Created a smart walking stick for the visually impaired. It alerts users about obstacles ahead, improving their mobility and confidence. By integrating an **ultrasonic sensor**, the device gathers real-time data and provides auditory or tactile feedback. **Arduino** technology is used for efficient implementation.

Title: Handwritten Digit Recognition Click Here

- Developed a handwritten digit recognition, leveraging **Python programming**, and **deep learning** expertise with **Keras**.Skilled in overcoming challenges posed by diverse handwriting styles to accurately identify numerals from digit images.

Title: Sales Performance Analysis and Visualization for Designer Homes Using Power BI Click Here

- This project involves analyzing and visualizing the sales performance of **Designer Homes** using Power BI. It includes a comprehensive dataset of sales transactions, highlighting key metrics such as item cost, sales by region, product performance, and salesperson activity. The Power BI dashboard provides interactive insights to track trends, optimize strategies, and make data-driven business decisions.

Title: ProMach Human Capital on DashBoard Click Here

- The ProMach **Human Capital** Dashboard provides insights into employee demographics, turnover, salaries, and terminations, highlighting key trends like high attrition in Production and Operations, low salaries influencing turnover, and dissatisfaction with career opportunities and roles as main reasons for terminations. It aims to help improve workforce retention and HR strategies.

RESEARCH PAPERS

Title: A Novel and Secure Anonymous Authentication Scheme for Smart Home Automation Systems Click Here

- The proposed IoT authentication framework for smart home automation systems uses **Elliptic Curve Cryptography** (ECC) to enhance security. It focuses on anonymous identity management to protect user privacy, mutual authentication to verify both device and user identities, and replay attack prevention using timestamps or nonces to block malicious resending of messages. ECC is chosen for its efficient and secure key exchange, ensuring data integrity and confidentiality without overburdening resource-constrained IoT devices. Together, these measures safeguard against unauthorized access and protect the integrity of communications in the smart home environment.

Title: Fake News Detection Using RoBERTa Click Here

- Researched an advanced method for fake news detection, merging text and image data through multimodal fusion. Used **RNN**s and **CNN**s, our model excels at identifying patterns in both text and images, surpassing conventional techniques. Extensive testing confirms its superior performance in spotting fake news. This innovative approach aids in combating misinformation and refining adaptive systems to preserve information integrity. Furthermore, employing **GPT** models enhances our capacity to detect textual inconsistencies and biases, bolstering our efforts against misinformation.

Title: Reinforcement Learning for Strategic Connect4: Deep Q-Network Approach Click Here

- Applied **reinforcement learning** (RL) techniques to enhance Connect4 gameplay, using **deep Q-networks** (DQN) to train agents for strategic decision-making. It tackles challenges such as the game's evolving complexity and balancing short-term gains with long-term strategies. Emphasis is on resolving the exploration-exploitation dilemma in RL to improve decision-making. The ultimate aim is to expand RL applications in strategic board games, deepen gaming understanding, and drive future advancements in the field.

WORK EXPERIENCE

SAB IT Services **August 2024 - December 2024**

UI Designer

- As a UI Developer, I craft intuitive and adaptable user interfaces using HTML, CSS, and JavaScript, prioritizing seamless functionality across various browsers and devices. I work closely with UX designers to bring their visions to life, adhering to industry best practices and accessibility guidelines to create high-performing, inclusive digital experience.

Vie Labs Inc **July 2022 - March 2023**

Marketing Executive

- Developed and executed marketing strategies, crafting engaging digital content for social media, email, and website campaigns to promote Vie Labs Inc. products and services.

ACHIEVEMENTS

- Served as **Vice-President** of Around The World Club(AWC), one of the leading clubs in our institution.
- Designated as a key member of the **Editing Team Lead** in the prestigious ViTonomic, Kalki Personality Development, Think & Thrive Clubs
- Esteemed Member of the Computer Society of India (CSI) club.

POSITION OF RESPONSIBILITIES

- Held the position of **School Representative**, providing effective leadership and guidance to the school community
- Held the position of **Secretary** in the Young Students Movement (YSM), providing effective leadership and guidance for the enhancement of the community