CH Varun

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EDUCATION

Bachelor of Technology (B.Tech), Computer and Communication Engineering   **2021-2025**
Amrita Vishwa Vidyapeetham, Chennai   **(current) CGPA: 7.01**

Secondary Education   **2020-2021**
Narayana Jr College, Hyderabad   **percentage: %90.2**

Secondary School of Education   **(Year Of Completion)2019**
Dr. Kkr's Goutham High School,Hyderabad   **CGPA: 9.5**

WORK EXPERIENCE

Government Internship   **Jul 2022 - Aug 2022 Water**
and Land Management Training and Research Institute(WALAMTARI)
- Implemented a combination of IOT and AI to achieve a 90% water use efficiency boost, contributing to sustainable agricultural practices.
- Capitalize on the individual strengths of a four-member team by assigning tasks accordingly and managing to complete the work in 30 days.
- Designed and deployed a cutting-edge, user-friendly mobile app with an intelligent system, enabling 300 farmers to optimize groundwater usage in real-time.

PROJECTS

From Pixels to Prevention(Deep Learning for Real-Time Plant Disease Identification and Prediction)   **Mar 2023 - May 2023**
- Enriched training data for a machine learning model with ~10,000 labeled plant disease images, expanding its ability to detect a wider range of pathologies.
- Revolutionized plant disease diagnosis with a 98% accurate model, combining CNNs and deep learning techniques.
- Built a Django-powered website for seamless integration and real-time detection, boosting agricultural efficiency.

Beyond Pixels(Predicting Paths with Context-Aware Computer Vision)   **Apr 2023 - May 2023**
- Pioneered AI-powered path prediction for agricultural robots using computer vision and advanced data structures.
- Engineered a 92% accurate robot path prediction algorithm, boosting field efficiency.
- Led a team of two to a top-three finish at the Vit Agrithon hackathon, with our project impacting 70% potential users/farms.

Fall-Free Future (Elderly Fall Detection with Intelligent Monitoring)   **Sep 2023 - Jan 2024**
- Engineered and enhanced a cost-effective ML system predicting body values from one sensor, simplifying data collection by 90%.
- Improved body monitoring precision by 40% with LiDAR implementation, unlocking deeper insights from data collection and analysis.
- Managed a team of 3, delegating tasks strategically, supporting challenges, and fostering a collaborative, motivated environment.

Learning from Experience (Reinforcement Learning for Real-Time Control in Cyber-Physical Systems)   **Dec 2023 - Feb 2023**
- Developed and trained a Reinforcement Learning (RL) model for various test cases within a Cyber-Physical System (CPS).
- Successfully deployed RL policies seamlessly from software to hardware, creating a closed-loop learning and control system.
- This innovative approach achieved an impressive 80% efficiency improvement compared to traditional methods, demonstrating the potential of RL for optimizing CPS performance.

SKILLS

Languages: C, Python, Java, Java Scripts

Frame Works: My SQL, MangoDB, HTML, CSS, React Native, Flutter, Machine Learning, Deep Learning , Reinforcement Learning , Natural Language Processing , Computer Vision .

AWARDS

Smart India Hackaton(SIH)
- Spearheaded a team of 6, securing 2nd place in a Smart Street Light Management System competition with our groundbreaking idea for sustainable cites

VIT Agrithon
- Scored 3rd at VIT Agrithon, collaborating with Nvidia & IIT Hyderabad, thanks to our team's successful development of an AI-powered algorithm.

Head of Inter-College-Competition Event
- Strategically led and coordinated a vibrant inter-college competition scene, overseeing 15+ unique events and inspiring participation and healthy competition among student communities.

Open Source Contribution
- Demonstrated proficiency in Python and machine learning by contributing to the renowned Scikit-Learn library.

CERTIFICATES

- Soft Skills IBM Certification
- Introduction to Raspberrypi and Computer Vision in Python
- Machine Learnig and Data Science in Udemy