

Anshul Chawla

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EDUCATION

Pandit Deendayal Energy University, Gujarat, India
Bachelor of Science in Mechanical Engineering

2020 - 2024

Navrachana Higher Secondary School, Gujarat, India

2008 - 2020

WORK EXPERIENCE

King Mongkut's Institute of Technology Ladkrabang, Thailand

Student Researcher

June 2023 - Aug 2023

- Conceptualized and built a fully operational pick-and-place robot utilizing state-of-the-art 3D printing technology.
- Engineered a cost-effective solution for object sorting based on shape, implementing the YOLO algorithm, and deploying it on a Jetson Nano platform.
- Acquired advanced expertise in edge computing by deploying ROS (Robot Operating System) and MoveIt software on the Linux platform.
- Elevated the robot's capabilities, enabling it to efficiently execute intricate picking and placing tasks with enhanced speed and precision.

AB Plastomech

Research Intern

May 2023 - Aug 2023

- Spearheaded the development and implementation of tailor-made machine learning vision solutions for intricate industrial applications, achieving a remarkable 20% increase in accuracy compared to prevailing models.
- Collaborated with a dynamic engineering team to seamlessly integrate 3D modeling from Solidworks into the machine learning vision solutions.
- Realized a substantial 30% improvement in visualization capabilities, enhancing the overall efficiency and precision of the implemented solutions.
- Applied cutting-edge UI design and Human-Machine Interface (HMI) principles to craft user-friendly interfaces for the machine learning vision solutions.
- Successfully reduced training time for new users by 50%, streamlining the onboarding process and ensuring swift adoption of the advanced technologies.

Coincent.ai

Research Intern

July 2022 - Dec 2022

- Implemented technologies including TensorFlow, Python, and cv2, resulting in an impressive 30% reduction in processing time compared to previous models.
- Achieved a notable milestone by significantly enhancing the efficiency of the AI model, setting new benchmarks for processing speed in the realm of autonomous vehicle technology.
- Concurrently earned the Azure AI Fundamentals certification.
- Demonstrated expertise in cloud-based artificial intelligence technologies, showcasing a commitment to staying at the forefront of advancements in the field.

SKILLS

- Python 3, Java Script, C#, React JS, CNN, Deep Learning Techniques, Azure AI, CFD (OpenFOAM , OpenLB) , 3D Modelling (Solidworks, Fusion360), Video Editing(Corel VideoStudio, Adobe After Effects), LabVIEW, Linux, CAD (AutoCAD, Solid Edge), MATLAB, C++, Control Systems, Troubleshooting, Time Management, Teamwork, Project Management, MS Office

COMMUNITY SERVICE & PROJECTS

- Volunteered at a local NGO for women, teaching engineering, and technology, promoting women in the region to take up technology as a professional domain.
- **Simulation of transient 2D Convection Diffusion:** Developed and executed a comprehensive simulation of 2D Convection Diffusion using Python and Opencv2, utilizing the Stream function and vorticity approach to accurately model fluid flow dynamics. Optimized computational efficiency by implementing parallel processing techniques, reducing simulation time by 40% and allowing for real-time analysis of large-scale data sets.
- **AI assisted Sorting Robot Arm at Asian Institute of Technology:** Implemented advanced AI algorithms, specifically YOLO v7, enabling the robot arm to accurately differentiate and sort objects based on their shape with an impressive accuracy rate of 95%. Drove efficiency by reducing sorting time by 50%, resulting in a significant increase in productivity and throughput for the sorting process. Engineered and constructed a cutting-edge robot arm using 3D printing technology, incorporating a single-board computer (SBC) for seamless operation.
- **Encode – Design for Change:** Developed and executed a comprehensive research plan to identify key pain points faced by marginalized groups, resulting in the creation of an app that addressed 90% of their healthcare access challenges. Led a cross-functional team of five students across different domains to create an easy to use and easy to familiarize app as well as ensure smooth communication between the team.

LANGUAGES: Hindi, English

INTERESTS: Game Design, CFD, Computer Vision, Deep Learning, Gaming