

ANUSHA LAVANURU

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EDUCATION

- Columbia University in the city of New York, New York** Expected Dec 2024
- > Master of Science, **Computer Science**
 - > **Courses:** ML, NLP, Algorithms, Databases, VR/AR, UI Design, Computer Graphics, Human Computer Interaction, Data Visualization
 - > **Teaching Assistant:** UI Design (Fall '24), Introduction to Databases(Spring '24), Computing in Context(Fall '23)
- Gokaraju Rangaraju Institute of Engineering and Technology, India** July 2017 - May 2021
- > Bachelor of Technology, **Computer Science and Engineering**
 - > **Courses:** Algorithms, Data Structures, AI, Advanced Calculus, Probability and Statistics, Big Data, OS, Networks



SKILLS

Languages : Java, Python, React, JavaScript
Tools : Git, Figma, Jira, Jenkins, Conference, Unity, Blender, OpenGL
Python Libraries : OpenCV, Pandas, NumPy, Scikit, matlab, TensorFlow, MySQL, Pytorch, NLTK

WORK EXPERIENCE

- Research Assistant | Computer Graphics and User Interfaces Lab** Sept 2024 - present
- > Engineered networking solutions using **Photon** for real-time geospatial data visualization in immersive **XR** environments, enhancing collaborative research on polar regions
 - > Optimized data transmission protocols between Oculus Quest 2 headsets and external displays, improving latency and user experience for virtual exploration of ice-sheet radar data
- Research Assistant | Computer Enabled Abilities Lab** May 2024 - present
- > Developed **AR** application using **Unity** and **Blender** for "Community History through AR" project, enhancing local historical engagement
 - > Conducted user studies to iterate on prototypes, and implemented advanced features like categorized hyperlinks for scanned buildings
- SDE Intern | NomadFi** May 2024 - Sept 2024
- > Developed **React** front-end components for fin-tech website, including homepage, dashboard, and settings page
 - > Engineered **OCR** system for invoice processing with database design, and integrated results with **credit risk model**
- Automation Engineer II | Shure Audio Technologies** Aug 2022- Aug 2023
- > Featured as a key team member in development of 'Designer NextGen' a pioneering feature. Initiated code development for 35 new features employing POM methodology, resulting in enhanced code maintainability and re-usability
 - > Represented Shure India team for 'Trial Licensing' and 'Global Auto-mixer' features. Automated over 100 test-cases reducing manual effort by 70% accelerating QA process
- Automation Engineer I | Shure Audio Technologies** Aug 2021- Aug 2022
- > Led development of 'Trial Licensing' feature contributing to 40% increase in software sales and company's first 1-billion-dollar turnover
 - > Optimised test scripts and automated 100+ reusable test cases, reducing manual efforts by 70% and test execution time by 30%

PROJECTS

- antARctica**  Sept 2024
- > Worked on a Pol-XR project where users can interact with radargrams and scientific data to explore glaciological processes in Antarctica and Greenland, enhancing the study of ice-sheet dynamics through immersive XR technology
- GenAI - Probing GPT-2 Layers in Relationship Analysis**  Jan 2024
- > Probed **GPT-2** model using **Baukit** library, analyzing MLP and attention layers with **SNLI** corpus. Trained classifiers on hidden states for identifying entailment, contradiction, and neutral relationships, revealing **incremental** learning across layers
- Image Enhancement using GANs** Dec 2023
- > Orchestrated a team of 4 in a photo beautification project by implementing two-way **GAN**, employing **U-Net** and **Wasserstein GAN** models on NUS dataset
- Hand Gesture Recognition** Sept 2023
- > Led a team of 5 to build a gesture recognition model using DL algorithm to detect and classify gestures using CV libraries like OpenCV and tensorflow which generated data with 98% accuracy