Anirudh Kambhampati

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https://anirudh2k0.netlify.app/

WORK EXPERIENCE

University of Missouri | CERI

Columbia, MO

Graduate Research Assistant

August 2022 - Present

- Improved the efficiency of WFMZ-TV Newsrooms by 80% by implementing efficient data management solution to orchestrate the dataflow between S3, DynamoDB and webapp built on React, Flask, MYSQL and hosted on EC2.
- Built the RISE system that automates upscale Microscope control with Reinforcement Learning (MADDPG, Q-Learning) improving accuracy in image analytics. It also features Web-Portal with Chatbot built using MERN stack, S3 and hosted in EC2. YouTube Video
- Led the design and development of a cloud based secure architecture for medical IOT devices.
- Built a novel Pedagogical Agent in Metaverse that teaches Cyberdefense to people in Neuro divergent spectrum with Reinforcement Learning (DQN).
- Working on the CAVE system in VR and communicating with stakeholders on demos and working ideas to improve research focus in VR.

Cognizant Technological Solutions

Chennai, IND

Programmer Analyst Trainee

Oct 2021-March 2022

• Demonstrated hands-on learning and initiative by cloning websites such as Amazon and Udemy and other user-friendly interfaces using React JS, Redux, Node JS, Mongo DB gaining practical experience and deepening understanding of web development concepts.

RESEARCH PAPAERS

• "Learning-based Image Analytics in User-AI Agent Interactions for Cyber-enabled Manufacturing" Conference: IEEE ICHMS | Status: Accepted

Index-terms: RL, AI, Control feedback, Image Analytics, Network Security, Chatbots

• "Empathy-Driven Design and Inclusive Cybersecurity Education: The Initial Phase of the uSucceed Project's Virtual Reality Curriculum for Neurodiverse Adults in STEM"

Conference: IEEE iLRN2024 | Status: Accepted

Index-terms: Pedagogical Agent, DQN, GCP, VR, Enhanced Learning, Cyberdefense, Escape Rooms

"Automation of News Content Curation and Storytelling for Local Newsrooms"

Conference: 2023 IEEE DIKW Conference | Status: Accepted

<u>Index-terms</u>: Local News, Data Curation, Artificial Intelligence, Machine Learning, Neural Networks

EDUCATION

University of Missouri-Columbia

Columbia, MO

Masters in computer science

August 2022-June 2024

SKILLS

- Cloud technologies and DevOps: Amazon Web Services
- Cloud Tools: S3 Bucket, DynamoDB, EC2, Lambda, CloudWatch, KMS, VPC, IAM, Dialogflow
- Databases: MySQL, MongoDB
- Programming Languages & Source Control: Python, JavaScript, C#, Git.
- Frameworks and Tools: React.dev, Vite, Redux Toolkit, Flask, NodeJS, Unity, Microservices, REST APIs, Postman, Microsoft Graph API, TensorFlow, Pytorch.
- RL models: Q-Learning, Deep Q Networks, MADDPG (Multi Agent Deep Deterministic Policy Gradient), A2C (Advantage Actor Critic)