

PATHAPATI VENKATA SAI SARAVAN

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EDUCATION

University Of Maryland Baltimore County

Master of Science in Computer Science

May 2024
Baltimore, USA

Vellore Institute Of Technology

Bachelor of Technology in Computer Science

May 2022
Vellore, India

SKILLS SUMMARY

- **Languages:** Python, PHP, SQL, C#, JavaScript
- **Frameworks:** Flask, TensorFlow, Keras, Django
- **Libraries:** Scikit, NLTK, SpaCy
- **Tools:** Kubernetes, Docker, GIT, MySQL, Blender, Audio Mixer, AWS Lambda, Amazon S3
- **Platforms:** Windows, Linux, Unity, Unreal Engine, Arduino, Raspberry, GCP, AWS
- **Soft Skills:** Leadership, Event Management, Writing, Public Speaking, Time Management

PROJECTS

Anonymizing Users' Behavior In Virtual World Using Differential Privacy

Jan 2023 – May 2023

University Of Maryland Baltimore County

- Implemented an array of privacy-enhancing techniques to anonymize user behavior derived from in-game data.
- Developed a comparative chart highlighting the equilibrium between privacy and usability, illustrating the effectiveness of differential privacy in addressing privacy concerns arising from targeted advertising and surveillance.

Intelligent Play: Enhancing Gaming Experience through Reinforcement Learning

Aug 2022 – Dec 2022

University Of Maryland Baltimore County

- Developed a reinforcement learning agent that can play the 2D game.
- The agent was trained on a dataset of gameplay data, and was able to learn how to play the game.
- The agent predicts how its actions would affect the state of the environment. This information was then used to plan the agent's next actions in order to achieve its goals.

AI-Enhanced Realism in Gaming: Crafting Dynamic Environments and NPCs

Jan 2022 – May 2022

Vellore Institute Of Technology

- Showcase of how artificially driven Non-Playable Characters and interactive environments are used in the process of making games more realistic.
- Created Character State machines, Animation Transitions, Trigger systems, and Audio mixers.
- Developed a zombie themed environment to show how non-ideal interactive NPC makes game more realistic and immersive.
- Presented in ICT4SD 2022 International conference by Springer.

Human gait Recognition

Aug 2021 – Dec 2021

Vellore Institute Of Technology

- Object detection (YOLOv3) and pose estimation (HRNet) on the CASIA-B dataset
- Obtain the accuracy per probe angle excluding identical-view cases

CERTIFICATIONS

Mathematical Thinking in Computer Science | Coursera

Nov 2019

<https://coursera.org/share/c4cc97bedafc4085325168b5b34d4224>

Introduction to the Internet of Things and Embedded Systems | Coursera

Jun 2020

<https://coursera.org/share/afad2e3bdef32ab80df047948f0db62>

PUBLICATIONS

Springer Publications/ ICT4SD 2022 International conference | Nov 2022

Artificial Intelligence in Game Programming

DOI : https://doi.org/10.1007/978_981_19_5221_0_60

VOLUNTEERING

Research Volunteer In Malware Analysis Research Group | Dec 2022

University Of Maryland Baltimore County

Collaborated with Professor Charles Nicholas to gain insights on the application of machine learning in malware analysis.