# PATHAPATI VENKATA SAI SARAVAN

Baltimore, MD | 410-869-5848 | saravan.pathapati@gamil.com | linkedin.com/in/saravan-pathapati

## **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

• Platforms: Windows, Linux, Unity, Unreal Engine, Arduino, Raspberry, GCP, AWS

Soft Skills: Leadership, Event Management, Writing, Public Speaking, Time Management

## **PROJECTS**

## Anonymizing User's 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 University Of Maryland Relimore County

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.

## Al-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.