RIYA KANANI

Ellicott City, MD 21043
443-996-5839 ♦ riya.kananiwork@gmail.com ♦ LinkedIn ♦ Website ♦ Github

EDUCATION

University of Maryland, College of Computer, Mathematical, and Natural Sciences — May 2025
Bachelor of Science, Computer Science and Immersive Media Design — GPA: 3.85
Relevant Coursework: Algorithms, Discrete Structures, Computer Systems, Creative Coding, Calculus II, Linear Algebra, Data Science, Computer Vision, AI, Data Structures, Object Oriented Programming, Statistics, Android App Development

WORK EXPERIENCE

Cortina Productions — McLean, VA
Software Engineer Intern — Jun 2025 – Aug 2025

- Gained full-stack familiarity with the Unity development pipeline, including render pipelines (URP/HDRP), asset management, and deployment workflows.
- Collaborated in a multi-developer environment using Git version control (Bitbucket) and SourceTree for branch management and code reviews.
- Integrated Nuitrack/Orbbec gesture tracking APIs with Unity FBX avatars to mirror real-time user movement
- Developed boundary detection systems that monitor physical positioning and trigger timeout protocols when users step out of the interactive zone utilizing C#.
- Built Unity front-end experiences driven by a producer-facing backend interface, using custom APIs to dynamically load assets and scene data.

University of Maryland — College Park, MD
Teaching Assistant: Introduction to Immersive Media — Aug 2023 – May 2024

- Provided debugging assistance for Unity Engine projects and C# scripts **twice weekly** in class and during **weekly** office hours.
- Guided students in transforming ideas into successful projects and provided constructive feedback on **weekly assignments** to support academic and professional growth.

Rock Creek Group — Washington, DC
Data and Reporting Intern — Summer 2023

- Fully Developed **5 key software solutions** for data modeling, visualization, and computation, enhancing efficiency while ensuring reliability through rigorous testing and debugging of team scripts, including a dynamic drawdown calculator that allowed user inputs for precise calculations.

RESEARCH

University of Maryland — College Park, MD
Undergraduate Researcher: SuperFoldAE — Jun 2024 – Current

- Designed and implemented a supervised autoencoder model with auxiliary reconstruction tasks to enhance model generalization and stability for protein fold prediction, achieving an **88.73% accuracy**.
- Leveraged a high-performance computing cluster for efficient model training and data processing.
- Presented findings at the Computational Structural Biology Workshop (CSBW), showcasing advancements in deep learning for biological data interpretation.
- Secured **$1,200** in professional development funding to support participation.

NASA Ocean Project — College Park, MD
Researcher — Aug 2023 – May 2024

- Authored C# scripts to simulate phytoplankton responding to camera input data in Unity Engine.
- Played a key role in **weekly brainstorming** sessions to create an effective method to represent phytoplankton across various zoom scales, ensuring visual cohesion and engaging the user.

Cloud Computing Research Lab — College Park, MD
Peer Research Mentor — Aug 2021 – May 2023

- Collaborated with colleagues on an image classification model, leveraging a convolutional neural network, AlexNet, in conjunction with a decision tree classifier that integrated geospatial data, attained **81.29% accuracy**.
- Utilized the NASA Globe Clouds database to curate a data set with around **400 datapoints** comprising of cloud images with essential metadata attributes including longitude, latitude, and timestamp.

SKILLS

Software: Unity Engine, Adobe Suite, Microsoft Office Suite, Cinema4D, Maya
Languages: Java, Python, Linux, C, MIPS Assembly, Ocaml, Ruby, Rust, Latex, C#, C++, JavaScript, HTML, SQL