

RIYA KANANI

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EDUCATION

Carnegie Mellon, Master of Entertainment Technology

Exp. May 2027

University of Maryland, Bachelor of Science

May 2025

Computer Science and Immersive Media Design

GPA: 3.85

SKILLS

Software: Unity Engine, Adobe Suite, Microsoft Office Suite, Cinema4D, Maya, Figma,

Languages: Java, Python, Linux, C, MIPS Assembly, b, Ruby, Rust, Latex, C#, C++, JavaScript, HTML, SQL

WORK EXPERIENCE

Cortina Productions

McLean, VA

Software Engineer Intern

Jun 2025 – Aug 2025

- Built Unity front-end experiences driven by a producer-facing backend interface, using custom APIs to dynamically load assets and scene data.
- Collaborated in a multi-developer Agile environment using Git version control (Bitbucket) and SourceTree for branch management, code reviews, and CI/CD pipeline integration.
- 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#.
- Gained full-stack familiarity with the **Unity** development pipeline, including render pipelines (URP/HDRP), asset management, and deployment workflows.

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 a week in class and office hours.
- Guided students in transforming ideas into successful projects and provided constructive feedback on weekly assignments to support academic and professional growth.

PROJECTS

Crimson Premonition

College Park, MD

Video Game

Aug 2023 – Dec 2023

- Learned effective human computer interaction when designing a video game for intuitive play
- Utilized tools such as gestural recognition, particle systems, computer vision, and networking in Unity Engine

ACTIVITIES

Girls Who Code

College Park, MD

Web Developer and Teaching Assistant

Feb 2023 – May 2025

- Contributed to the website development and maintenance in **weekly meetings**, utilizing tools including Figma, HTML, and CSS.
- Provided instructions in python fundamentals to middle and high school aged girls twice a semester.

RESEARCH

University of Maryland

College Park, MD

Undergraduate Researcher:

Jun 2024 – May 2025

SuperFoldAE & ConSOLAE

- 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**.
- Improved out-of-distribution performance on SCOP 2.06 from **22.63% → 54.22%** Top-1 accuracy, demonstrating significant advances in generalization
- Leveraged a high-performance computing cluster for efficient model training and data processing.
- Introduced contractive **regularization**, **Smooth L1 reconstruction**, and a **deeper encoder-decoder structure** to stabilize training and capture fine-grained structural features.

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.