

Hridiza Roy

hridiza.com

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EDUCATION

Rochester Institute of Technology

Bachelor of Science in Computer Science
Bachelor of Science in Applied Arts and Sciences
(Self-designed major)
Concentrations:
**Computer Graphics, Imaging Science,
Virtual Production**
August 2021 - December 2025
GPA: 3.67 | Honors Student

SKILLS

Programming

C++, Python, MEL, Qt, PySide, GLSL, OpenGL,
Vulkan, CSS, JavaScript, OpenCV

Misc

Linux/Unix, Git, Visual Studio, CMake

Film & Animation

Maya, Blender, Adobe Premiere Pro, After Effects

EXTRACURRICULARS

ASWF Summer Learning Program

- Selected as one of 20 participants from across the globe for this program
- Strengthened skills focusing on technical careers in Animation and VFX via technical coursework and mentorship from industry professionals

Re-Founder & President, RITGraph | SIGGRAPH Student Chapter

- Organize collaborative Computer Graphics projects between artists and software developers

Founder, Inter-disciplinary tech + film club

- Increased the **number of women** in technology in the school by **over 25%**
- Taught C++ and Web Development to students and managed 65+ club members

AWARDS

- ACM-W Scholarship for SIGGRAPH
- Grace Hopper Conference Scholarship
- David and Melissa Egts Scholarship | RIT
 - Awarded to 1 Undergrad Computer Science Student
- Winner, Explainer Video Contest | Adobe
- 1st Place, 33rd Annual RIT Public Speaking Contest
 - Why you should use filler words in your speeches:
hridiza.com/projects/fillerWords
- Performing Arts Scholar (Dance) | RIT

RELEVANT EXPERIENCE

Graphics Software Engineer

May 2024 - August 2024

Simone Center Startup Accelerator Program

Rochester, NY

- Worked in a team of 3 on our startup that creates gamified custom simulation software for training for small and medium size businesses
- Conducted 50+ Customer Discovery interviews
- Developed a VR demo using **Unreal Engine** and **C++**

Software Engineer Intern

May 2023 - December 2023

Ocean Optics

Rochester, NY

- Increased scalability of the **Color Sensor** Software by expanding it for multiple sensors using **Python (PySide)** and **C++**
- Improved maintainability and performance of the Spirit Sampler software by redesigning and porting it from C# to **C++ (Qt)**
- Discovered and fixed a bug in FTDI's **official** library for communicating from a windows system to an embedded device via I2C using **C**

PROFESSIONAL EXPERIENCE

Physics and Math Tutor

January 2023 - April 2023

RIT, Academic Success Center

Rochester, NY

- Tutored students in Optics, Mechanics, Linear Algebra, Electricity, and Calculus

Communications Consultant

August 2022 - April 2023

RIT, Expressive Communication Center

Rochester, NY

- Helped people write technical speeches for non-technical audiences

PERSONAL PROJECTS

Demo Reel | hridiza.com/demoreel

USDview plugins (Python)

- Wrote plugins for asset expense heatmap generation, dynamic camera creation, and keyboard-shortcut camera change

C++ Raytracer from scratch

- Implemented multi-threaded Monte-carlo path tracing and Emissive Materials

Rendering Pipeline using Vulkan and C++

Maya Plugin

- Developed a displacement shader plugin for **Maya** using **C++**, **Python**, **MEL**, **CMake**, and **Visual Studio**

Pancake | Smart image presets

- Worked with 2 Motion Picture Science students to create a software using **C++** and **OpenCV** that creates 'smart presets' for images, for adapting a preset to an image's needs based on its properties like brightness and saturation instead of applying the same effects to every image

Virtual Lab

- Developed a web-app from scratch simulating a 3D classroom using **HTML**, **CSS**, and **JavaScript (No libraries)**