Ronith Kumar Devarakonda

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BIO

- I am a Master of Engineering student in Game Design at Duke University with a Bachelor's in Electrical Engineering from IIT Delhi, blending technical expertise with creative problem-solving.
- I have led and contributed to projects from designing wireless power systems to creating immersive game environments with Unreal Engine. My extracurricular achievements, including leadership roles and collaborative initiatives, have fueled my passion for innovation and teamwork. I am driven to craft meaningful, interactive experiences and am always eager to connect with others who share a commitment to advancing technology and game design.

EDUCATION

Duke University — Durham, North Carolina
Master of Engineering in Game Design, Development and Innovation — Aug 2024 – May 2026

Indian Institute of Technology [IIT] Delhi | **CGPA - 6.82 out of 10** — New Delhi, India
Bachelor of Technology in Electrical Engineering — Nov 2020 – Aug 2024

EXPERIENCE

Game Design Teaching Assistant — Oct 2024 – Present
Duke University — Durham, North Carolina

- Collaborated with Professor Ernesto in coordinating and supporting meetings with the Design Committee to drive key initiatives in design-focused academic and community programs.
- Designed Duke by Design, an innovative website that consolidates design-oriented programs, courses, and communities across multiple departments, enhancing accessibility and collaboration at Duke University.

PROJECTS

Wordless | Unreal Engine 5, Blueprints, Team-based — Game Jam, Oct 2024 – Nov 2024

- Collaborated on Wordless, an online multiplayer game combining Pictionary-style mechanics with creative interactions.
- Designed and implemented level layouts and interactive object blueprints in Unreal Engine 5, enabling object manipulation, player highlighting, and word-based HUD displays.

Square Dino | Lua, Playdate Developer — Sep 2024 – Nov 2024

- Developed a Playdate game inspired by the browser dinosaur game, featuring jumping, ducking, and dynamic obstacle speed to increase challenge.
- Implemented a HUD for score tracking, a main menu for navigation, and enhanced the game with complex obstacles and a light/dark color shift every 10 points to improve visual appeal.

Implementation of Computer Graphics Techniques | C++ — Jan 2024 – Apr 2024

- Developed expertise in computer graphics by implementing various techniques for creating a clock and a 3D scene.
- Implemented path tracing, simulation, and key framing to enhance scene realism, reinforcing skills in computer graphics and animation.

Image Processing Techniques using OpenCV | Python — Jan 2023 – Apr 2023

- Implemented various image processing techniques using the OpenCV library, including artistic image enhancement and style transfer, rendering real photos into non-photo-realistic painting-like images by manipulating light and shadow relations.

Wireless Power Transfer System | Research Student — May 2023 – Dec 2023

- Designed and implemented a 40W wireless power transfer system using inductive power transfer, optimizing inductor coils for minimal power loss($< 5\%$).
- Performed simulations in MATLAB Simulink and collaborated on capacitor optimization, combining hands-on experimentation with technical analysis for precise system performance($< 1\%$).

TECHNICAL SKILLS

Languages: C, C++, Python, HTML, CSS, LaTeX
Software: Blender, Unity, Unreal Engine 5, Figma, MATLAB, LTspice, Microsoft Office, Linux, Adobe Creative Cloud
Developer Tools: Git, Visual Studio, VS Code, Rider, Perforce