Kadir Lofca

Software Engineer

NC, United States

> kadirlofca@outlook.com

| kadirlofca.com | kadirlofca.com | kadirlofca.com | kadirlofca.com | kadirlofca.com | kadirlofca.com | kadirlofca | kadirlofca.com | kadirlofca | kadirlofca.com | kadirlofca | kadirlofca.com | kadir

I'm an enthusiastic computer science student with experience as a VR software developer and undergraduate researcher. I have been featured in the <u>UNCG Science Magazine</u> for my work in VR. I write clean code, communicate well, and am excited for a future with immersive and interactive VR.

SKILLS

- C#, C++, Python
- Unity, Unreal Engine, Visual Studio, Blender, Audacity, Photoshop
- GitHub, GitLab, Slack, Asana, Microsoft Teams

EDUCATION

University of North Carolina Greensboro – Expected May 2024

• Bachelor of Science in Computer Science.

Guilford Technical Community College - October 2019 to May 2020

Successfully finished AP/university level courses during high school.

EXPERIENCE

Virtual Reality <u>Time Perception Research</u> – August 2021 to Present

Undergraduate Researcher

- Designed VR experience aimed at studying human time perception by researching past studies and discussing with mentor.
- Used Blender to model exact replica of laboratory where experiment was conducted.
- Utilized SteamVR to simultaneously track the positions of 4 objects and display them in VR.
- Programmed reusable tool to automatically create and export data tables from Unity.
- Analyzed 480 data points by utilizing R and RStudio.
- Secured progress of project by pushing versions to GitLab.

Magnolia House Virtual Reality Tour - February 2021 to August 2021

Software Engineering (VR) Intern

- Led team from development to successful launch of VR tour.
- Programmed VR teleportation and menu controls using C# and Unity.
- Created realistic shaders and materials using Unity's shader graph tool.
- Increased frame rate by 50% using frustum and occlusion culling in Unity, and reducing poly-count in Blender.
- Simulated realistic audio with a low-pass filter based on listener's position.
- Utilized GitHub to manage versions of project.

Game Development Tool Quick Character - October 2022

Programmer

- Recreated popular games' character movement systems using C# and Unity.
- Programmed a scalable state machine for character movement states such as walking, falling, wall running.
- Wrote clean, extensive documentation for game development tool.

Game Jam GMTK 2022 - July 2022

Programmer, Artist

- Led team through design and development stages of an action game.
- Implemented health and combat system for game characters using C# and Unity.
- Created character art, voiced a character, and designed a level.

Workshop HackNC 2022 - May 2022 to November 2022

Programmer, Workshop Instructor

- Led workshop about game development for hackathon attendees.
- Demonstrated game development and programming fundamentals by creating a 2D game with Godot and visual scripting.

Hackathon HackReality 2021 - March 2021

Programmer, Team Lead (Team of 4)

- Programmed system to hold and drop physics objects in VR using C++ and vector math.
- Created VR game avatar capable of teleporting using Blueprints.
- Led team of 4 to successfully create VR puzzle game using Unreal Engine 4.

ACTIVITIES, SERVICE & OTHER

Epic Games' Unreal Engine Accelerator Experience – October 2022

Unreal Engine Technical Support Volunteer

Assisted over 20 concurrent attendees in navigating and troubleshooting Unreal Engine 5.

Interactive Realities Lab - February 2021 to Present

Member & Study Logistics Czar

Managed laboratory schedule for 10+ members by appointing study and research dates.

Association for Computing Machinery University Chapter – May 2020 to Present

Member & Treasurer

• Managed club finances and organized weekly club meetings for up to 30 attendees by inviting speakers and preparing technology related presentations.

Unreal Engine Related YouTube Channel – April 2020 to Present

Video Editor, Channel Manager

- Reached 50,000+ views by producing game design and development videos.
- Recorded and edited 30+ videos using DaVinci Resolve and Audacity.

Barry Goldwater Scholarship – October 2021

Nominee

• Nominated for prestigious scholarship by University of North Carolina Greensboro based on exceptional research and academic success.

Convocation Day for the College of Arts & Science - August 2021

Panel Speaker

 Shared academic success insights to incoming freshmen upon invitation from University of North Carolina Greensboro.