# Kadir Lofca

## Software & Game Development

NC, United States

(336) 802-0127

❱ kadirlofca@outlook.com

❱ linkedin.com/in/kadirlofca

❱ kadirlofca.com

❱ github.com/kadirlofca

I'm an enthusiastic computer science student with experience as a software developer and undergraduate researcher. I have been featured in the UNCG Science Magazine for my work in VR. I write clean code, communicate well, and am excited to build great things!

## 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 Time Perception Research – 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.

**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.

**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.

## 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.