Grady Wright

Computer Engineer

∠ gowright98@gmail.com

www.grady-wright.com

in linkedin.com/in/grady-wright

github.com/littleg13

Education

University of Kansas

Experience

Software Engineering Intern

SpaceX

mathred 1/2021 - current

- Create large scale automated UI testing framework
- Write Python to implement automated writing and executing of UI tests
- Implement features and fix bugs for Garmin chart plotters using C
- Work with image comparison algorithms to implement UI test validation

Software Engineering Intern

Garmin Ltd

5/2019 - 8/2019

- Create large scale automated UI testing framework
- Write Python to implement automated writing and executing of UI tests
- Implement features and fix bugs for Garmin chart plotters using C
- Work with image comparison algorithms to implement UI test validation

Undergraduate Research Assistant

The University of Kansas

 $mathred{m} 1/2019 - 6/2019$

- Assist in development of real-time ray tracing simulation of communication networks
- Develop CUDA C++ for simulation of raytracing
- Write C++ for visualization of simulation using OpenGL

Network Student Architect

The University of Kansas

4/2018 - 5/2019

- Create and update documentation centered around whole network overhaul
- Write C# and Python for automatic generation of network documentation
- Management of Aruba and Cisco switching/routing configuration

Involvement

Tau Beta Pi

Engineering Honor Society

• Active member through volunteering, tutoring, and test preparation

Eta Kappa Nu

IEEE Honor Society

Active member through volunteering and coursework assistance

Skills

- Proficient using OpenGL and CUDA
- Experience with ray-marching and signed distance fields
- Extensive experience with automated UI and regression testing
- 3D modeling experience using AutoDesk Maya 2018, Blender, AutoDesk Inventor 2018

Honors and Awards

First Place HackKU 2020

The University of Kansas

• 1st place in the FinTech track of KU's annual hackathon for development of peer-to-peer money transfer system

Undergraduate Achievement Award

Eta Kappa Nu

• Awarded to top students in EECS 221 Electromagnetics

Projects

Twitch Overlay

Computer Graphics

- OpenGL rendered mesh particle system that updates with information gathered from the Twitch API
- Communicates with Twitch API using HTTP/Websocket protocols written with Winsock
- Supports separate build for ray-marched SDFs allowing for soft-shadows and reflections

Fluid Simulation

Computer Graphics

- SPH fluid simulation built entirely in OpenGL
- Utilizes OpenGL compute shaders to apply particle physics and update render position
- Optimization is done using spatial hashing on particle positions

Mooxter

HackKU 2020

- Peer-to-peer payment transfer system to utilizing everyday applications, such as Discord, Slack, Twitter
- Allows for XRP to be sent utilizing the Xpring API
- Utilizes Kubernetes to easily add interfaces and scale