# ANTON FRANZLUEBBERS

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# **OBJECTIVE**

VR enthusiast with experience in Unity, Blender, and a passion for game development.

# **EDUCATION**

Doctor of Philosophy, University of Georgia

2019 - Present (Expected 2023-2024)

Major Concentration: Electrical & Computer Engr

Gulfstream Fellow

Bachelor of Science in Computer Science and Computer Sys Engr University of Georgia 2015 - 2019 First Honor Graduate, Summa Cum Laude, Academic Award in Computer Systems Engineering (2018-19)

#### **SKILLS**

Tools Unity 8 years, Blender 13 years

Languages (order of familiarity) C#, Python, Javascript, SQL, Java, C, C++, Rust, Dart

### **PROJECTS**

**conVRged** Independently designed and created a multi-purpose VR meeting application in Unity. Used as a base for several research projects in my PhD work. (More Info)

**ENGREDUVR** VR and desktop training tool for land surveying equipment built in Unity. This tool is still being used by students at the University of Georgia. (More Info)

**NERVE-Dawg** A VR simulation of a dog with various neurological deficiencies. This project was used in cooperation with the School of Veterinary Medicine to train the procedure of the neurological examination. (More Info)

**DataFoldvr** A VR and desktop point cloud visualization and annotation tool. Heavy use of GPU acceleration for the continuous level of detail and real-time annotation systems. (More Info)

# PERSONAL PROJECTS

**Spark** .NET 6 and WPF companion application for Echo VR that has a long feature list. It is widely used in the competitive Echo Arena community, and is an essential tool for league casters. The project is open source with some contributions from other members of the community (https://ignitevr.gg/spark). **Spark Mini** is the cross-platform counterpart to Spark built with Flutter for users without access to a Windows PC. (More Info)

**Echopedia** Created, hosted, and contributed data to a community wiki for Echo VR using MediaWiki. This project also involved scraping data from various historical leages to generate hundreds of player and team pages. (More Info)

Replay Viewer Made significant contributions to a open-source replay viewing software for Echo VR built in Unity. My contributions involved work in Blender, customization of rendering in Unity, and design of the mechanisms involved in reading and saving replay files. This includes the design and implementation of a custom binary file format called Butter, inspired by video compression techniques. (More Info)

Player Count Graphing Created a database with historical user counts for Gorilla Tag. A Discord bot responds with a graph of past CCU numbers. Built using MariaDB, FastAPI, and Discord.py to manage hundreds of millions of data points. (More Info)

## **LEADERSHIP**

- Active in the support Discord server for Spark and Spark Mini, where I help hundreds of potential users with a variety of levels of computer experience.
- Primary point of contact outside of the Lab Director for our VR research lab for technical help with other lab members.