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# Justin Bishay

Website Portfolio: <https://jkbishay.github.io>

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## Education

### University of Hawai'i at Mānoa

GPA: 4.00

Computer Science **Masters**

**August 2019 - Present**

### University of Hawai'i at Mānoa

GPA: 3.80

Computer Science **Bachelors**

**Received May 2019**

## Skills

Programming Languages:

**C, C++, C#, JavaScript**, Python, Java, HTML/CSS, R

Toolsets/OS:

**Windows 10, Mac OS X**, Unix/Linux, Git/GitHub, Helix Visual Client (P4V)

Other Software/Tools:

**Unity, Visual Studio, Visual Code**, Node.js, Blender, Streamlabs/OBS

## Work

### Graduate Research Assistant

**August 2019 - Present**

Laboratory for Advanced Visualization Applications

- Manage and troubleshoot large multi panel display systems called CyberCANOE's
- Implemented cloud pixel streaming for data visualization applications (ex. ParaView)

### Engineering Intern

**May 2021 - August 2021**

Bungie

- Coordinated with designers and other engineers to upgrade text chat systems
- Developed new features and helped launch Cross Play in Season 15 of Destiny 2

### Undergraduate Research Assistant

**January 2018 - August 2019**

Laboratory for Advanced Visualization Applications

- Collaborated with others on augmented and virtual reality research projects
- Maintain augmented and virtual reality devices and large data visualization systems

## Extra Curricular

**Team Manager** for Collegiate Esports Team

**March 2020 - Current**

**President** of Game Dev Club

**January 2019 - May 2021**

**Tournament Organizer** for Official Super Smash Bros. Esports

**March 2017 - Current**

## Projects

### DynaCoVE

January 2019 - Present

C++, C#, Javascript, Unity, Virtual/Augmented Reality, Data Visualization, Networking

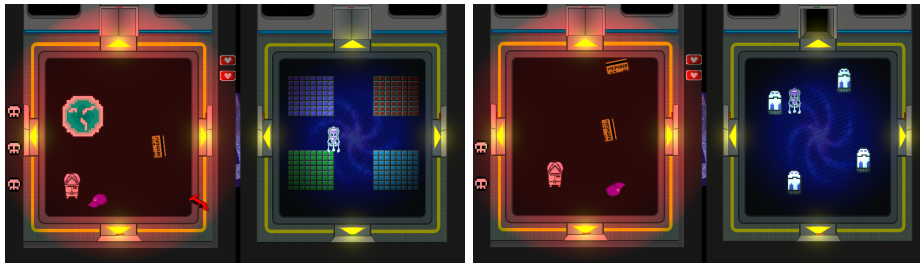
- Cloud-pixel streaming application for multiple devices including VR/AR
- Real time data visualization on large data sets between multiple remote sites

### Lost and Found: In Space

January 2021

Unity, C#, Game Design

- Co-op action puzzle game where one player survives and the other searches for them
- Worked on a team of 2 programmers and 2 artists for Global Game Jam 2021
- <https://globalgamejam.org/2021/games/lost-and-found-space-7>



### COVID-19 Global Hot Spots Map

March 2020 - June 2020

Javascript, HTML, CSS, Leaflet, Data Visualization

- Interactive map that shows new COVID-19 cases for each day along with totals
- Includes time series charts and a slider to view map at previous dates
- <https://hotspotmap-coronavirus.github.io/>

### Evo Tank

May 2020

Artificial Intelligence, Evolutionary Computation, Unity, C#, Game Design

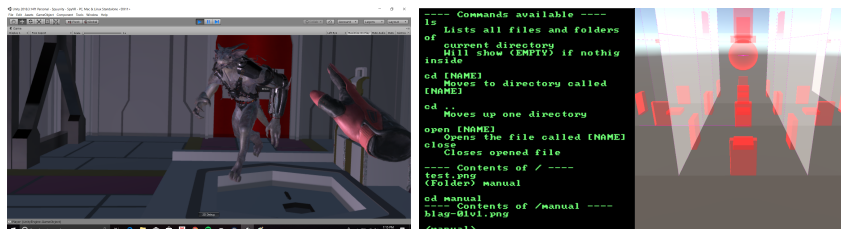
- Tank game where an AI controlled tank attempts to achieve the highest score
- Runs an evolutionary algorithm to optimize the attributes of the tank
- <https://jkbishay.github.io/projects/evotank>

### S.P.I.E.S.

October 2019 - December 2019

Virtual Reality, Networking, Unity, C#, Game Design

- Spy game where a player in virtual reality navigates a building and solves puzzles
- Remote player helps the spy by tracking the spy's position and building layout
- <https://jkbishay.github.io/projects/spies>



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## Keller's Hall

August 2019 - September 2019

Virtual Reality, Unity, C#

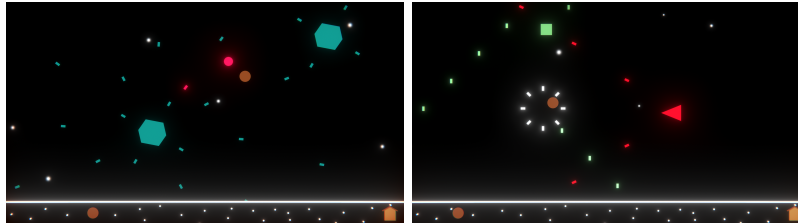
- Virtual reality horror experience where users physically walk down a scary hallway

## We, the One

January 2019

Unity, C#, Game Design

- Short 2D bullet hell style game made for Global Game Jam 2019
- <https://jkbishay.github.io/projects/wetheone>



## Olympic History Visualization

October 2018 - December 2018

Javascript, HTML, Data Visualization

- Webpage that visualizes the results of the winter and summer olympics history
- Users can query data by country, sport, and gender

## RUNba CRUSH

July 2018 - November 2018

Unity, C#, Blender, 3D Modeling, Game Design

- Base defense game with touch controls that supports up to 4-player co-op



## HoloRacer

June 2018 - October 2018

Augmented Reality, Unity, C#, Blender, 3D Modeling, Game Design

- An application to create a race track and drive around cars in user's environment
- Race against AI cars that can be guided with waypoint markers
- <https://jkbishay.github.io/projects/holoracer>

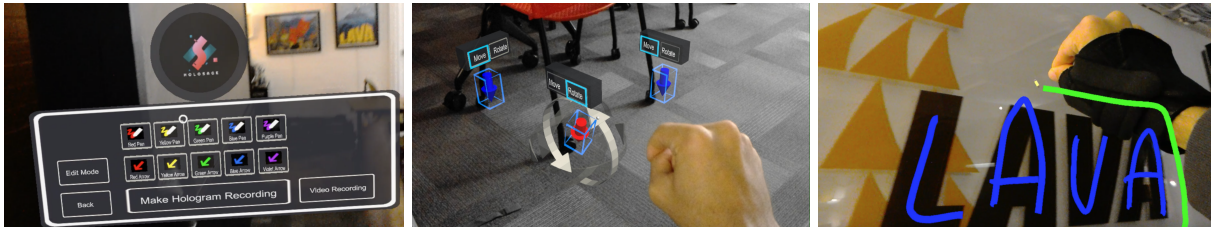


## HoloSage

January 2018 - October 2018

Augmented Reality, Unity, C#

- Annotation and training application that can create and play back holographic annotations as recordings with sound; recordings can also be saved and loaded
- <https://jkbishay.github.io/projects/holosage>



## 1854 Cholera Outbreak in London

September 2018

Javascript, HTML, Data Visualization

- Webpage that visualizes the data of the 1854 cholera outbreak in London with interactive charts and maps
- <https://jkbishay.github.io/hidden/dataviz/cholera/>

## Turretz

March 2018

Augmented Reality, Networking, Unity, C#, Game Design

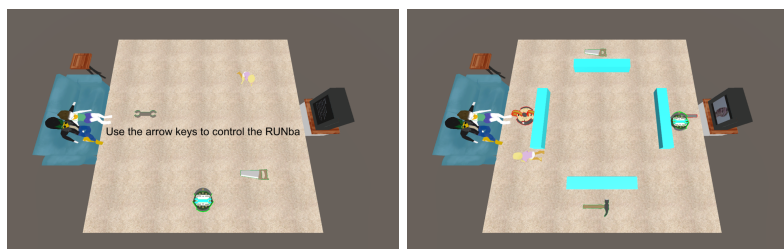
- Tower defense game where the player's environment is the battlefield
- Networking is used to play cooperatively from mobile devices
- Game was awarded the first place prize for Best Gaming/Entertainment App of \$1000

## RUNba RUSH

January 2018

Unity, C#, Game Design

- Short indie puzzle game where the player controls multiple RUNbas (Roombas)
- Must clean up hazards before a toddler eats them
- Community award for Dramatically Diverse in Global Game Jam 2018
- <https://jkbishay.github.io/projects/runbarush>

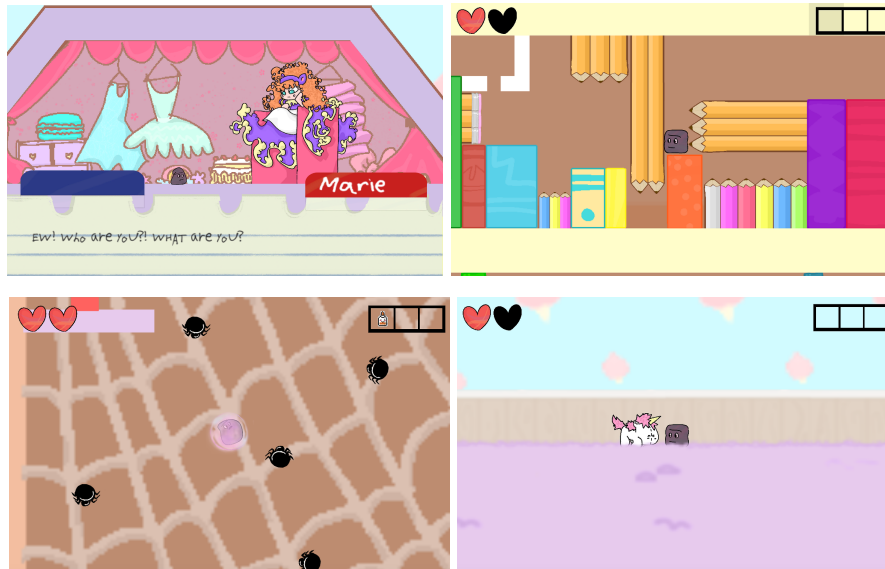


## Playto

September 2017 - December 2017

Unity, C#, Game Design

- 2D puzzle platformer game where the player plays as a piece of playdoh
- Playdoh can morph between three forms each with different capabilities
- <https://dreamingbento.github.io/>



## Super Circle Joe

January 2017 - April 2017

Java, Game Design

- A 2D bullet hell style arcade shooter where the player plays as a circle
- Defeat endless waves of enemies by changing the color of attacks
- <https://jkbishay.github.io/projects/supercirclejoe>

