

portfolio: calebcarithers.com email: calebcarithers@me.com telephone: +1 (864) 735 2605

#### education:

Purdue University
BS Mechanical Engineering
Minor in Electronic Art
3.77/4.0

# experience:

### C Design Lab Undergraduate Researcher

June '17-'19

Grad: Aug. 2019

Co-led development on StoryMakAR, a platform for virtual physical interactions through storytelling, prototyping, and augmented reality, consisting of a hardware/electronics toolkit and software application. Responsible for developing the pairing and communication between application and IoT devices, constructing the UI, and designing + prototyping foldable cardboard toys. Built in Unity.

Co-Author of Toying With Design: Experiencing Design for Rapid Prototyping Using Mini-Fabrication Exercises (IDETC/CIE 2018)

Was part of collaborative teams working on projects in human centered design as well as skill transfer in rapid prototyping.

# GreyMob Design

Designed brand specific vector graphics for GreyHouse Coffee. Explored graphic design in a studio setting under the supervision of a managing designer.

## projects:

# PaintHead (Online Interactive Exhibition)

Interactive online exhibition framed as a social analysis on the user's own comfort within the space they are viewing, while delivering a personal interjection on identity. As the user scrolls through the gallery and screams, the true meaning of the project is revealed through moving text and objects. Built using p5.js.

## bloonNoise (Physical Interactive Installation)

Experimenting with unconventional interaction, the user is prompted to touch the ribbons of balloons that are embedded with sensors. Once a ribbon is touched, a sound is triggered which causes an on-screen particle system to react. Built using OpenFrameworks + Arduino.

## Nebula (Music Video/Web Game)

Currently building an interactive experience for the song "Nebula" by musician Admiral Raddis. Designed sprites invoking Super Mario Bros. + Minecraft aesthetic. Introduces a new interaction in music video design, allowing the audience to interact with the world displayed. Built in Unity with C#. Deployed on the web.

#### technical skills:

### Languages:

Python, Javascript, C, C#, HTML & CSS, Processing/p5.js, OpenFrameworks

#### Software:

Adobe Creative Suite, Unity, SolidWorks, CATIA, Keyshot, LabVIEW

#### Other:

Arduino, Raspberry Pi, Additive/Subtractive Manufacturing, DFMA