# TIANA HO'OLANA HUSTED

Eugene, OR 97401 | (971)404-1043 | tiana.husted@gmail.com **Portfolio:** https://thusted.github.io/InteractiveArtPortfolio/

#### **EDUCATION**

# Certificate in Full Stack Web Development: University of Oregon,

April-October 2020

Portland, OR

• A 24-week intensive program focused on gaining technical programming skills in HTML5, CSS3, Javascript, JQuery, Bootstrap, Node Js, MySQL, MongoDB, Express, Handelbars.js & ReactJS.

#### **Bachelor of Science: Music Technology:** University of Oregon

September 2016-December 2018

Eugene, OR

• A 4-year program focused on electronic composition, sound design, and musical interface design.

# **Associate's Degree: General Studies/Music:** Lane Community College

September 2013-June 2016

Eugene, OR

• A 2-year Associate's degree with an extended focus on music theory and composition, music technology, and audio engineering.

# PROFESSIONAL EXPERIENCE

# **Department Director** House of Strange Rituals LLC,

September 2018-Present

Eugene, OR

- Co-founded all-female Eugene-based interactive art collective
- Manage the collective's Sound and Interactive Art Department
- Develop and construct interactive elements in large-scale art exhibitions
- Train and delegate tasks to team members
- Engineer circuits, design custom software, program Arduino microprocessors, and produce original sound for art pieces
- Co-wrote and awarded competitive Black Rock City Honoraria Grant for \$20,000 to build "The Dollhouse"
- Produced events and fundraised \$18,000 for "The Dollhouse"

#### **Producer and Tech Design Lead "**Blink," Windowfront Exhibitions,

March 2021-Present

Eugene, OR

- 3D printed and assembled 7 animatronic eye mechanisms, embedded into the heads of giant paper mache poppy pods
- Wrote custom software in Max/MSP for PIR sensor data processing and interactive DMX lighting control
- Soldered over 600 wires to locking connectors for efficient installation of the animatronic eyes
- Designed lighting for exhibit and performances
- Programmed Arduino microprocessor to intake data from PIR motion sensors and control 7 animatronic eye mechanisms
- Implemented 4 16-channel PWM servo drivers to control 42 micro servo motors in eye mechanisms
- Utilized computer power supplies for power distribution
- Created system to maintain eye mechanism hardware and software systems for 2-month exhibit

# **Tech and Lighting Designer "**Beat," BEAM by Art City

October 2020

Eugene, OR

- Designed custom force sensitive resistor
- Wrote custom software in Max/MSP, using data from FSRs to trigger audio in Ableton Live
- Designed LED lighting system that responded to audio amplitude
- Programmed Arduino microprocessor
- Utilized computer power supplies for power distribution
- Soldered locking connection points for easy installation

# **Exhibiting Artist and Tech Maintenance "**The Moving Dolls," Manual Experience *January-March 2020*

Eugene, OR

- Converted 13 porcelain dolls into animatronic showpiece dolls
- Implemented 4-channel relay switch and 16-channel PWM servo driver with Arduino microprocessors
- Wrote custom software in Max/MSP, integrating data from OpenCV facial recognition software to track the movement of participants and relay information back to servo motors in animatronic dolls
- Designed interactive lighting that responds to human interaction
- Utilized computer power supplies for power distribution
- Soldered locking connection points for easy installation
- Successfully kept all technology systems functional for 2-month exhibit

#### **Audio Technician** Velvet Thunder Sound Systems

July 2018-March 2020

Eugene, OR

- Operated specialized sound equipment for events at McDonald theatre
- Planned and executed equipment set-up in collaboration with touring performers and crews
- Utilized excellent problem-solving abilities in fast-paced technical environment
- Demonstrated adaptability during unpredictable events and strong attention to detail

#### **Sound and Lighting Department Director "**The Dollhouse," Burning Man

March-September 2019

BRC, Nevada

- Engineered circuits for 10 interactive art pieces
- Programmed Arduino microprocessors
- Implemented a variety of sensors, including capacitive touch and PPG heart rate monitors
- Projection mapped animations using MadMapper
- Wrote custom software in Max/MSP for 3 interactive art pieces
- Designed exhibit lighting, using a combination of 12V Edison emulating bulbs, LEDs, and DMX
- Soldered over 500 locking connectors throughout exhibit for easy installation
- Managed and delegated tasks to team of 4 electrical and sound engineers
- Worked collaboratively with team of 17
- Successfully installed interactive technology, sound, and lighting equipment within 5-day timeline
- Maintained interactive art, sound, lighting, and power systems for the entirety of the Burning Man event week

# **Monitor Engineer** High Sierra Music Festival

*July 2018 and 2019* 

Quincy, CA

- Constructed and deconstructed stages and sound systems
- Engineered sound for 7 performances a day for 4 consecutive days at 1,000-person shows
- Adapted stage design and sound engineering on a moment's notice between sets
- Devised work plans to execute tasks on an extremely tight timeline

#### **Installation Artist "Sonic Steps," Wilsonville Festival of Arts**

June 2018

Wilsonville, OR

- Responsible for keeping interactive and sound systems fully operational for 3-day festival
- Engineered custom software with Max/MSP, using FSR data to trigger audio in Ableton Live
- Programmed Arduino microprocessor
- Designed custom force sensitive resistors
- Successfully installed sound equipment for 3-day festival
- Built installation that withstood the force of approximately 100 children each day