# Siyu Huang

Madison, WI 53715 | 608-658-0143 | shuang353@wisc.edu

#### **Education**

#### University of Wisconsin – Madison | Madison, WI

Dec 2021

Bachelor of Science double major: Computer Science & Data Science

GPA 3.66/4.00

Certificate: Game Design

**Research Interest** 

• Data Visualization and Human-Computer Interaction

Relevant Coursework

Computer Graphics, Data Visualization, Artificial Intelligence, Algorithms, Game Design,
 Digital Imaging Studio

#### **Publications**

Investigation on Data Visualization Accessibility in Video Games

2021

- Submitted to EuroVis 2022.
- This project discusses data visualizations in video games and their accessibility support to visual-impaired players. By surveying blind gamers, some problems are found, and we propose potential solutions.

Image data visualization using t-SNE for Urban Pavement Disease Recognition

2021

- Accepted by the 4th International Conference on Computing and Data Science (CONF-CDS 2022).
- From analyzing pavements images of a city and extracting features, this project visualizes several features using t-distributed stochastic neighbor embedding.

## **Employment**

Data Science Institute at University of Wisconsin-Madison

2021 - present

- Al for Africa Project
- Lead the front-end work of a multi-purpose app featuring messaging, social media, machine translation and chatbot.

Recreation & Wellbeing at University of Wisconsin-Madison

2018 - 2019

held 8 intramural soccer matches as the referee

## **Projects**

Data Sonification Survey Website

2021

- This website lets people "hear" data by sonifying and it surveys people about their understanding which can be stored in the back end via Firebase.
- Developed the whole website solely, including front-end, back-end, and testing.

Pickled Beats 2021

• A 2D game developed by Unity where players create a garden that in turn generates unique music. Built with 6 other members in UWM Game Lab.

Designing the User Interface and title screen of the game and coding the player controls.
 Movie Chatbot

- This website featuring a chatbot that talks like movie characters.
- Developed the website solely, and Universal Sentence Encoder is used to generate the appropriate response to user's input.

The Factory 2021

- A first-person puzzle-platform game based on the story of an artist; developed by Unity.
  CareerHelp
  - Lead the front-end work of a mobile app that aims to provide help for job applicants.

## Ice Cover Regression

2020

• Implemented a gradient descent algorithm to predict the number of ice days in Madison for a future year based on past records.

#### COVID -19 Growth Trend

2020

 Using hierarchical clustering to visualize the conditions that several regions dealing with COVID-19.

## Platform Game "Climb Up"

2020

• A 2D video game made by JavaScript client-side library p5.

### **Skills**

Programming language: JAVA, JavaScript (proficient), HTML, CSS, Python, and C#.

Other: Adobe Premiere, Final Cut Pro; Unity game engine

Languages: Chinese, English