# **Yiming Yao**

Minneapolis, MN | 628-800-4435 | yao00116@umn.edu | www.linkedIn.com/in/yimingyao1 | Personal Website: https://yimingyao-lab.github.io/AboutMe/

#### **EDUCATION**

# **Master of Science in Computer Science**

**Expected Graduation December 2022** 

University of Minnesota-Twin Cities, College of Science & Engineering,

Minneapolis, MN | Adviser: Stephen J. Guy

GPA 3.594

# **Bachelor of Science in Computer Science**

May 2021

University of Minnesota-Twin Cities, College of Science & Engineering,

Minneapolis, MN

GPA 3.612

# Associate of Science in Computer Information Science Associate of Science in Mathematics

May 2019

College of San Mateo San Mateo, CA GPA 3.343

#### **SKILLS**

Programming Languages: C, C++, C#, Java, Python, HTML, NodeJS, JavaScript

Tools: Android Studio, Unity, Github, Gradle, VisualVM, LaTeX

Software: Microsoft Office, PyCharm, MATLAB, Eclipse IDE, Visual Studio, IntelliJ, R Studio

Operating Systems: Windows, Mac OS, Linux

#### **PROJECT**

# **Mathematical Measures to Estimate Partisan Gerrymandering**

March 2022 – May 2022

Csci 8715: Spatial Data Science Research, University of Minnesota - Twin Cities

- Formally define six mathematical measurements to estimate partisan gerrymandering
- Perform the computation for various maps in Minnesota to quantify partisan gerrymandering
- Analyzing the mathematical behaviors in estimating partisan gerrymandering
- Validate the effectiveness and accuracy in the experiment

# Job Fair in Visual Reality

October 2021 - December 2021

Csci 5619: Virtual Reality and 3D Interaction, University of Minnesota - Twin Cities

- Implementing user interface to simulate in-person job fair in Unity
- Using Ray casting to select a target location (locomotion technique)
- Using triangle metaphors to change the yaw of selected object to handle difficult operation
- Using indirect proxy technique to scale the entire scene down and bring within user's reach with a miniature handled model.

#### **Route Planning Software**

Summer 2020

- Finding the optimal path on the University of Minnesota map by using A\* algorithm
- Implement user interface to visualize the path on the map, which contains the transient nodes

- Analyzing accuracy about the solution by comparing theoretical optimal path, which given by our software and actual path on the map
- The source code and analysis report are available on Github: https://github.com/yimingyao-lab/Route-Planing-Software

#### **EXPERIENCE** Summer Intern

# IDG Capital, Beijing, China

June 2019 - August 2019

- Guiding the data of NEVs batteries energy density into statistical model and predicting their efficiency and life
- Engaging and summarizing the information and data of ADAS and algorithms to build the database
- Designing web crawler in python to catch to the NIO stock information in NASDAQ and analyzing the analyzing the NIO stock price in next five years
- Worked closely with the department director to strategize and implement operations related to market research

**LANGUAGE** English (SVIEP Level 4), Chinese (Native Language)

AWARDS University of Minnesota, College of Science & Engineering, Dean's List Spring & Fall 2021 College of San Mateo, Cum Laude Honor 2017 – 2019