# Runduo (Melody) Ma

rma76@wisc.edu | +1 (608) 949 4602 | https://www.linkedin.com/in/runduoma-224a39192/

#### Education

University of Wisconsin-Madison, Madison, WI

Double Major: Computer Science & Piano Performance

Expected Summer 2023

GPA: 3.90/4.00

Coursework

Coursework

Artificial Intelligence, Algorithm, Advanced Programming (Java, C++, C), Data Structure, Operating System **Fall 2021:** Compiler, Mobile application development

## **Experience**

**Introduction to Artificial Intelligence Peer Mentor •** *University of Wisconsin – Madison (Jan, 2021 – Present)* 

 Provided support to more than 300 students on course content and assignments. Helped instructors improve the classroom materials. Bridged the gap between students and instructors by collecting questions and giving feedbacks between them.

Front-end Developer Intern • Hangzhou Clounix Technology (June, 2021 – Aug, 2021)

- Learned basic network system and adapted to a fast-paced work startup quickly. Designed 50% of the company's next B2B cloud native software prototype by xiaopu and Vue.

Computer Science Teaching Assistant • Guangzhou Foreign Language School (Sep. 2018 – June, 2019)

- Mentored over 20 students in AP CS course, and American Computer Science League Programming Competition (ACSL).
   5 students ranked as the top 10 team in the ACSL Competition.
- Organized discussion and helped students to review CS assignment weekly. Improvement was seen as 30% of students got 5/5 scores on the 2019 AP exam.

# **Projects**

An Intelligent Robot Navigation System • Stanford Summer Program Aug 2018 • Python

- Integrated a motion planner (in python) with real-time control for the robot. When the robot searched the environment, the navigation system collected the data from the sensor and built a real-time map automatically.
- Calculated the shortest path from a random starting point to ending point based on the real-time map.

#### SnapSort • MadHacks Carbon Oct 2019 • Javascript

- Worked with a team and developed the mobile app that allows the user to take a picture by the camera integrated in the app. The app tells the user what kind of trash category and tracks the user's carbon footprint.
- Incorporated Google Vision API and linked it with the camera of the app, developed backend on node.js and frontend on React Native, and used MongoDB to store user data.
- Learned JS and designed trash classification algorithm within 2 hours. The correctness of the results is over 95%.

#### WaveWait • TreeHacks Feb 2021

- Developed a real-time social web app to connect people who are doing same thing in the same place.
- Help the team as a Product Manager by creating and defining the product. Worked on backend (Google Cloud) and UI design (sketches & Figma).

### **Activities & Involvement**

TreeHacks 2021, Participant • online • Feb 2021

MadHacks Carbon 2019, Participant • Madison, WI, USA • Oct 2019

Lazy-Bones Programming Club, President • Guangzhou Foreign Language School • Fall 2013 - Fall, 2018

- Initiated and coordinated programming club to taught 40+ junior high school students to program in Python and C weekly.
- Collaborated with other members, organized programming-related activities, and designed RPG games together.

Pokebot Artificial Intelligence for Robots, Stanford Pre-College Program • Stanford University • Summer 2018 Coding for Good Club, Member • UW-Madison • Mar 2020 – Mar 2021

- Helped to maintain the club website and updated the user profile page.

## **Honors & Awards**

Top 10 in the world in American Computer Science League programming contest 2019-2020 Dean's List of UW-Madison 2020 UW-Madison Summer Scholarship, Leo and Jean Besozzi Scholarship for Fall 2021

#### Skills

**Skills (ranked by skill level):** Python, Java, C, C++, Assembly Language, MATLAB, HTML, JavaScript, Vue **Others:** Self-motivation, Responsibility, Passion in teaching and sharing, Ability to learn new concepts quickly, Detail-orientation