# Jinlang Wang

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#### **EDUCATION**

### University of Wisconsin, Madison

Madison, Wisconsin

Master in Computer Science

Sep 2022 - May 2025 (expected)

Coursework: Big Data System, System Verification, User Interface Design, Building Interactive Systems, Intro to VR

University of Pittsburgh

Pittsburgh, PA

B.S. in Computer Science, GPA: 3.91/4.0

Aug 2018 - Apr 2022

## WORKING EXPERIENCE

## Software Engineer Intern

July 2021 - Oct 2021

 $Quantum \ Lab \mid Tencent$ 

Shenzhen, China

- Served as a lead engineer, where I designed the distributed timer service, implemented the **Paxos** algorithm using **Golang**, and distributed tasks among teammates. Won the 1st prize at the Tencent Intern Competition.
- Implemented EDA(Electronic design automation) software, specifically topological router with C++.

## Software Engineer Intern

Jan 2021 – May 2021

 $Data\ Platform \mid DiDi$ 

Beijing, China

- Developed a storage algorithm Kim for trajectory compression based on Facebook Gorilla database's algorithm.
- Achieved a low compression ratio (Kim 6.94% < Gzip 7.57%), fast compression (3 microseconds, 500 pieces of data), and strong scalability, saving 60% storage space in fusion, a distributed NoSQL database.
- Used Uber Kepler to automatically visualize the trajectory of riders.

## Deep Learning Intern

June 2020 - Oct 2020

China Mobile Research Institute

Beijing, China

- Proposed an attention-enhanced edge-cloud collaborative framework for multi-task applications.
- Compared results with several CNN models, including VGG and ResNet on various image classification datasets.
- Work published in 2020 IEEE IoTaIS: An Attention-Enhanced Edge-Cloud Collaborative Framework for Multi-Task Application. [PDF]

## RESEARCH EXPERIENCE

## EasyVizAR [Web]

June 2023 - Presenet

Advisor: Kevin Ponto | Research Project | Department of Computer Sciences

Madison, WI

- Participating in a large-scale project alongside three professors, actively collaborating and sharing weekly progress
- Developed a mobile AR app using **Unity** to enhance situational awareness and indoor navigational capabilities.
- Planned enhancements include additional features and conducting user studies in real-life fire stations

#### Virtual Museum [Demo]

Feb 2023 - May 2023

Course Project | Department of Computer Sciences

Madison, WI

- Led a team of three to develop a Unity-based virtual museum app for **Meta Quest 2**, featuring three immersive rooms: Impression, Nature, and Antique.
- Received positive feedback for the realistic exhibits, user-friendly navigation, and effective use of VR technology.

## Social Annotations in Museums with Mobile AR [Demo] [PDF]

Feb 2023 - May 2023

Advisor: Bilge Mutlu | Course Project | Department of Computer Sciences

Madison, WI

- Collaborated with a team to design an iOS system using **Apple ARKit**, employing mobile augmented reality for in-situ participatory interpretation and providing synchronized social annotations for visitors.
- Evaluated the system with visitors and found that visitors generally spent more time around artifacts when using the system, and that they perceived communicative and educational values.

# **Alcohol Detection in Labs**

Feb 2023 - May 2023

Course Project | Department of Computer Sciences

Madison, WI

- Designed a system that will monitor alcohol consumption in lab environments using ESP32, and used **OpenCV** to do face recognition.
- Evaluated the system with alcohol and found it successfully caught the tester's face.

#### TECHNICAL SKILLS

Languages: C, C#, C++, Golang, Java, Python, R, SQL, Swift Frameworks & Tools: Docker, Git, Linux, Unity