# RUXIN (DAISY) WANG

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My research interests are broadly in the area of Cybersecurity, Mobile Sensing and Computing, AI in Healthcare and AI for Security. My works have been published in top-tier conferences, including ACM WiSec '24, IEEE S&P '23, ACM CHI '22, ACM MobiCom '21, and IEEE MASS '21, and has been reported by LSU News, Tiger TV, Business Report, Digital Trends, TechXplore, Yahoo Finance, AI News, Mobile ID World and 30 other media outlets. I've been named among the Cyber-Physical System (CPS) Rising Stars in 2024 and a recipient of the N2Women Fellowship.

### **EDUCATION**

Southern Methodist University, Dallas, TX, USA <i>Ph.D.</i> in Computer Science (CS)	Aug. 2020 - Aug. 2025
Syracuse University, Syracuse, NY, USA M.S. in Computer Engineering (CE)	Aug. 2017 – May. 2019
Northeast Forestry University, Harbin, China B.S. in Electrical Engineering (EE)	Aug. 2013 – May. 2017

#### HONORS AND AWARDS

Cyber-Physical Systems (CPS) Rising Stars 2024	May.	2024	
Symposium Meritorious Awards at LSU's 5th EECS Graduate Student Research	ı Apr.	2024	
Travel Grant at the 44th IEEE Symposium on Security and Privacy (S&P23)	Apr.	2023	
Third Place Award at the 1st LSU's Graduate Research Conference	Apr.	2023	
Symposium Meritorious Awards at LSU's 4th EECS Graduate Student Research	ı May.	2022	
N2Women Fellowship & Travel Grant at the 27th Annual International Conference On Mobile Computing And Networking (ACM MobiCom21)  Nov. 2021			
Student Graduated with Honors at Northeast Forestry University	May.	2017	

#### **PUBLICATIONS**

- [IEEE MASS '25] R. Wang, GV. Gonzalez, W. Liu, C. Wang and T. Tseng, "DrinkMR: Unobtrusive Drinking Monitoring Using Off-The-Shelf Smart Glasses," in *Proceedings of the 22nd IEEE International Conference on Mobile Ad-hoc and Sensor Systems*, 2025.
- [IEEE MASS '25] J. Zhang, R. Wang and C. Wang, "Converting Your Bluetooth Headphones into Active Sensing Authenticator: a Bone-Conduction Solution," in *Proceedings of the 22nd IEEE International Conference on Mobile Ad-hoc and Sensor Systems*, 2025.
- [APHA '25] GV. Gonzalez, R. Wang, W. Liu, B. Mao, H. Lin, C. Wang and T. Tseng, "Advancing dietary monitoring through augmented reality: validation of AR glasses for chewing and swallowing behavior assessment", in *American Public Health Association*, 2025.
- [APHA '25] GV. Gonzalez, B. Mao, R. Wang, W. Liu, C. Wang and T. Tseng, "A systematic review of the effectiveness and usability of augmented reality as a dietary control measure", in *American Public Health Association*, 2025.

- [NTX BME Symposium '24] R. Wang, GV. Gonzalez, C. Wang and T. Tseng, "Poster: Unobtrusive Drinking Monitoring Using Off-The-Shelf Lightweight AR Glasses." in *North Texas Biomedical Engineering Symposium*, 2024.
- [ACM WiSec '24] R. Wang, K. Madden, L. Huang, C. Wang, "Enhancing QR Code System Security by Verifying the Scanner's Gripping Hand Biometric." *Proceedings of the 17th ACM Conference on Security and Privacy in Wireless and Mobile Networks*, 2024.
- [IEEE TVT '24] R. Wang, L. Huang, and C. Wang, "Fast Detection of Handheld Phone-distracted Driving by Sensing the Driver's Hand-grip." *IEEE Transactions on Vehicular Technology*, 2024.
- [IEEE S&P '23] R. Wang, L. Huang, and C. Wang, "Low-effort VR Headset User Authentication Using Head-reverberated Sounds with Replay Resistance." in *Proceedings of the 44th IEEE Symposium on Security and Privacy*, 2023.
- [XULA '23] GV. Gonzalez, C. Wang, R. Wang and TT. Tseng, "Poster: Extended Reality and Binge Eating Behaviors Among Minorities." in *Proceeding of the 16th Health Disparities Conference (XULA)*, 2023
- [ACM CHI '22] R. Wang, K. Madden, C. Wang, "Low-effort User Authentication for Kiosk Systems based on Smartphone User's Gripping Hand Geometry." Late Breaking Work of the 2022 CHI Conference on Human Factors in Computing Systems, 2022.
- [IEEE MASS '21] R. Wang, L. Huang, and C. Wang, "Preventing handheld phone distraction for drivers by sensing the gripping hand," in *Proceedings of the 18th IEEE International Conference on Mobile Ad-hoc and Sensor Systems*, 2021.
- [ACM MobiCom '21] R. Wang, L. Huang, and C. Wang, "Poster: Distracted Driving Detection By Sensing The Hand Gripping Of The Phone," in *Proceedings of The 27th Annual International Conference On Mobile Computing And Networking*, 2021.

## **TEACHING**

CSC7080 Advanced Computer Architecture Teaching Assistant (class size $\sim 30$ )	Fall 2023
CSC4562 Mobile Security and Applied Cryptography Guest Lecturer & Teaching Assistant (class size $\sim 50$ )	Spring 2023
CSC7700 Cyber-physical Security Teaching Assistant (class size $\sim 30$ )	Fall 2022
CSC2362 Introduction to Cybersecurity and Cyber Defense Guest Lecturer & Teaching Assistant (class size $\sim 80$ )	Fall 2021
CSC3501 Computer Organization and Design Teaching Assistant (class size $\sim 70$ )	Fall 2022

#### **MENTORSHIP**

#### Three K-12 Students.

Summer 2021, 2022, 2023

Project 1: In-Vehicle Smartphone Location Detection Using Device's Built-In Inertial Sensors.

- First place in the St.Joseph's Academy District Fair.
- First place in the Region VII Science & Engineering Fair.
- First place in the Louisiana State Science & Engineering Fair.

Project 2: Tracking Mixed Reality (MR) Users' App Usage Duration through Push Notifications.

Project 3: Detecting Hidden Security Threats With a Thermal Camera.

# Two Undergraduate Students.

2021 - 2023

Project 1: AR-enabled Multi-Modal Dietary Tracking System.

• Software Development Engineer at an insurance company.

Project 2: Two-Factor Smartphone Authentication by Leveraging Challenge-Response from the Phone-Smartwatch Channel.

• Undergraduate Research Assistant at LSU.

#### One Graduate Student.

2021 - 2022

Project: Enhancing QR Code System Security by Verifying Scanner's Gripping Hand Biometric.

• Senior Research Associate at the Pennington Biomedical Research Center.

## SERVICE

Conference Reviewer. CHI, ICDCS, IWUVT/UbiComp, AsiaCCS.

2021 - Present

Journal Reviewer. IoT, ESWA, Access, AIHC, Sensor.

2021 - Present

Organizer and Host. MobiCom '21 N2Women Event.

2022

#### **EXPERIENCE**

Wyze Labs, AI Scientist Internship

Jun. 2024 - Aug. 2024

Leveraging state-of-the-art Vision Language Models (VLMs) and Large Language Models (LLMs) for video anomaly event detection.

**HSBC Bank (China) Company Limited,** Software Engineer Aug. 2019 - Jul. 2020 Software development and testing, maintaining and Enhancing Financial Transaction Platform.