

Xingyu Chen

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EDUCATION	University of California San Diego (UCSD) Ph.D. in Computer Science and Engineering Advisor: Prof. Xinyu Zhang University at Buffalo (UB), the State University of New York (SUNY) B.S in Computer Science with Distinction Advisor: Prof. Wenyao Xu	Fall 2022 – Present August 2018 – June 2021 Overall GPA: 3.69
EXPERIENCE	Research Intern , Microsoft Research Asia Supervised by Prof. Lili Qiu Researcher , Mobile, Emerging Technologies & Applications (META) Lab University of Colorado Denver Supervised by Prof. Zhengxiong Li Research Assistant , Embedded Sensing and Computing (ESC) Group University at Buffalo, SUNY Supervised by Prof. Wenyao Xu	June 2023 – September 2023 August 2021 – August 2022 August 2018 – August 2021
AWARDS	Best Student Paper Award , IEEE International Conference on Health Informatics (ICHI) IEEE COVID-19 Sensor Informatics Challenge Runner-up Award (Second place) , IEEE Healthcare Summit (IHS) Dean's List Best Paper Award , SenSys'19	2022 2021 Fall 2018, Spring & Fall 2019, Spring 2020 2019
PUBLICATIONS	<ol style="list-style-type: none">[1] Xingyu Chen, Xinyu Zhang. "RF Genesis: Zero-Shot Generalization of mmWave Sensing through Simulation-Based Data Synthesis and Generative Diffusion Models", In: <i>SenSys 2023 (Conference full paper)</i>.[2] Xingyu Chen*, Zhengxiong Li*, Baicheng Chen*, Yi Zhu, Chris Xiaoxuan Lu, Zhengyu Peng, Feng Lin. "MetaWave: Attacking mmWave Sensing with Meta-material-enhanced Tags", In: <i>NDSS 2023 (*Co-first author) (Conference full paper)</i>.[3] Xingyu Chen*, Zhengxiong Li*, Srirangaraj Setlur, Wenyao Xu. "Exploring racial and gender disparities in voice biometrics", In: <i>Scientific Reports (*Co-first author) (Journal article)</i>.[4] Xingyu Chen, Xinmin Fang, Wenchuan Wei, Wenyao Xu, Zhengxiong Li. "Poster: Exploring an Extensible Children Game Framework based on Augmented Reality Building Blocks", In: <i>ACM Conference on Embedded Networked Sensor Systems (SenSys'21) (Poster)</i>[5] Xinmin Fang*, Xingyu Chen*, Wenyao Xu, Zhengxiong Li. "Poster: Enhanced Virtual Reality: Exploring an Immersive and Realistic Virtual Reality Training for Nursing", In: <i>ACM Conference on Embedded Networked Sensor Systems (SenSys'21) (*Co-first author) (Poster)</i>[6] Xingyu Chen, Chenhan Xu, Baicheng Chen, Zhengxiong Li, Wenyao Xu. "Poster: In-Ear Thermometer: Wearable Real-time Core Body Temperature Monitoring", In: <i>ACM Conference on Embedded Networked Sensor Systems (SenSys'20) (Poster)</i>[7] Huining Li, Xingyu Chen, Xiaoye Qian, Huan Chen, Zhengxiong Li, Soumyadeep Bhattacharjee, Hanbin Zhang, Ming-chun Huang Wenyao Xu. "An Explainable COVID-19 Detection System based on Human Sounds", In: <i>The IEEE/ACM international conference on Connected Health: Applications, Systems and Engineering Technologies 2022(CHASE'22) (Conference full paper)</i>	

- [8] Zhengxiong Li, Baicheng Chen, **Xingyu Chen**, Chenhan Xu, Yuyang Chen, Feng Lin, Changzhi Li, Karthik Dantu, Kui Ren, Wenyao Xu. "Reliable Digital Forensics in the Air: Exploring an RF-based Drone Identification System", In: *The ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (UbiComp'22)* (**Conference full paper**)
- [9] Zhengxiong Li, Baicheng Chen, **Xingyu Chen**, Huining Li, Chenhan Xu, Feng Lin, Chris Xiaoxuan Lu, Kui Ren, Wenyao Xu. "SpiralSpy: Exploring a Stealthy and Practical Covert Channel to Attack Air-gapped Computing Devices via mmWave Sensing", In: *The Network and Distributed System Security (NDSS'22) Symposium* (**Conference full paper**)
- [10] Chenhan Xu, Huining Li, Zhengxiong Li, **Xingyu Chen**, Aditya Singh Rathore, Hanbin Zhang, Kun Wang, Wenyao Xu "The Visual Accelerometer: A High-fidelity Optic-to-Inertial Transformation Framework for Wearable Health Computing", In: *the IEEE International Conference on Health Informatics 2022 ICHI* (**Conference paper**) [Best student paper award]
- [11] Huining Li, Huan Chen, Chenhan Xu, Anarghya Das, **Xingyu Chen**, Zhengxiong Li, Jian Xiao, Ming-Chun Huang, Wenyao Xu "Privacy computing using deep compression learning techniques for neural decoding", In: *Smart Health* (**Journal paper IF = 2.71**)
- [12] Chenhan Xu, Huining Li, Zhengxiong Li, Hanbin Zhang, Aditya Singh Rathore, **Xingyu Chen**, Kun Wang, MING-CHUN Huang, Wenyao Xu. "CardiacWave: A mmWave-based Scheme of Non-Contact and High-Definition Heart Activity Computing", In: *ACM Conference on Pervasive and Ubiquitous Computing (UbiComp'21)* (**Conference full paper**)
- [13] Baicheng Chen, Zhengxiong Li, Huining Li, **Xingyu Chen**, Chenhan Xu, Wenyao Xu. "ThermoWave: A New Paradigm of Wireless Passive Temperature Monitoring via mmWave Sensing", In: *ACM International Conference on Mobile Computing and Networking (MobiCom'20)* (**Conference full paper**)
- [14] Hanbin Zhang, Gabriel Guo, Emery Comstock, Baicheng Chen, **Xingyu Chen**, Matthew Stafford, Lora Cavuoto, Jeanne Langan, Wenyao Xu. "RehabPhone: A Software-Defined Tool using 3D Printing and Smartphones for Personalized Home-based Rehabilitation", In: *ACM International Conference on Mobile Systems, Applications, and Services (MobiSys'20)* (**Conference full paper**)
- [15] Zhengxiong Li, Baicheng Chen, Zhuolin Yang, Huining Li, Chenhan Xu, **Xingyu Chen**, Kun Wang, Wenyao Xu. "FerroTag: A Paper-based mmWave-Scannable Tagging Infrastructure", In: *ACM International Conference on Mobile Computing and Networking (SenSys'19)* (**Conference full paper**) [Best paper award]

SERVICES	Artifact Evaluation Committee , 5th International SenSys/BuildSys Workshop on Data	Sept-2022
	Volunteer Judge , CoorsTek Denver Metro Regional Science and Engineering Fair	Feb-2022
	Teaching Assistant , University of Colorado Denver	
	• CSCI 4771/5771 Introduction to Mobile Computing.	Fall-2021
	• CSCI 4773/5773 Introduction to Emerging System Security.	Spring-2022
	Presenter , University at Buffalo CSE Open House Event Project Demo	2018, 2019

COMMERCIAL PRODUCTS	Unity - Steam Networking Framework (Unity, C#)	2017
	One of the first few solutions of Steam multiplayer networking for Unity Engine. It was developed entirely by me solely. It is a low-level networking framework to connect Unity Component System and Steam P2P network services. It is used by commercial games such us RUSSIA BATTLEGROUNDS, a battle royale game that supports up to 32 players at the same time.	
	Spark Dimension (Unity, C#)	2014
	A 3D sandbox video game developed entirely by me solely when I was 14 years old. This game sold a total of about 8,000 copies worldwide on Steam, with a total profit of about \$15,000. This game was covered by numerous gaming media such as <i>ali213.com</i> , <i>indienova</i> , <i>SteamCN</i> , and <i>Baidu Baike</i> .	

REFEREES

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