# Yuxia Zhan

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Google Scholar

### **EDUCATION**

New York University

New York, NY, USA

Ph.D. in Computer Science

Sept. 2024 - June 2029 (Expected)

Advisor: Prof. Michael Walfish

Shanghai Jiao Tong University

Shanghai, China

M.Eng. in Computer Science (GPA: 3.92 / 4.0)

Sept. 2021 - Mar. 2024

Summa Cum Laude

Advisor: Prof. Haojin Zhu @ NSEC Lab

Shanghai Jiao Tong University

Shanghai, China Sept. 2017 - June 2021

B.Eng. in Computer Science (GPA: 89.23 / 100) IEEE Pilot Class and Zhiyuan Honors Program

# RESEARCH INTEREST

My current research focuses on **verifiable computing** (especially attestation), including approaches with trusted hardware (e.g., TPM, SGX, TDX, SEV-SNP, and GPU TEE) and without them (e.g., relying on zero-knowledge proofs).

Previously, I have investigated privacy challenges in VR/AR/XR environments and safety concerns in cyber-physical systems (CPS). Besides, I am passionate about any work that attempts to address the privacy issues within the advertising ecosystem.

## **PUBLICATIONS**

Yuxia Zhan, Yan Meng, Lu Zhou, Yichang Xiong, Xiaokuan Zhang, Lichuan Ma, Guoxing Chen, Qingqi Pei, Haojin Zhu, "VPVet: Vetting Privacy Policies of Virtual Reality Apps", in Proceedings of the 2024 on ACM SIGSAC Conference on Computer and Communications Security (CCS), 2024. [link]

Yuxia Zhan, Yan Meng, Lu Zhou, Haojin Zhu, "Vetting Privacy Policies in VR: A Data Minimization Principle Perspective", in IEEE Conference on Computer Communications Workshops (INFOCOM WK-SHPS), 2023. [link] **Q** Best Poster Award

Yan Meng, Yuxia Zhan, Jiachun Li, Suguo Du, Haojin Zhu, Xuemin Shen "De-Anonymizing Avatars in Virtual Reality: Attacks and Countermeasures", in *IEEE Transactions on Mobile Computing (TMC)*, 2024. [link]

Muchen Pan, Yan Meng, Yuxia Zhan, Guoxing Chen, Haojin Zhu, "PipID: Light-Pupillary Response Based User Authentication for Virtual Reality", submitted to Proceedings of ACM SIGSAC Conference on Computer and Communications Security (CCS), 2025. (To appear)

Raymond Muller, Ruoyu Song, Chenyi Wang, Yuxia Zhan, Jean-Philippe Monteuuis, Yanmao Man, Ming Li, Ryan Gerdes, Jonathan Petit, Z. Berkay Celik, "Investigating Physical Latency Attacks against Camera-based Perception", accepted by IEEE Symposium on Security and Privacy (S&P) 2025. [link]

Jiachun Li, Yan Meng, Yuxia Zhan, Le Zhang, Haojin Zhu, "Dangers behind Charging VR Devices: Hidden Side Channel Attacks via Charging Cables", in IEEE Transactions on Information Forensics and Security (TIFS), 2024. [link]

Yan Meng, **Yuxia Zhan**, Jiachun Li, Suguo Du, Haojin Zhu, Xuemin Sherman Shen, "De-anonymization Attacks on Metaverse", in *IEEE Conference on Computer Communications (INFOCOM)*, 2023. [link]

Brandon Falk, Yan Meng, **Yuxia Zhan**, Haojin Zhu, "POSTER: Reavatar: Virtual Reality De-anonymization Attack through Correlating Movement Signatures", in *Proceedings of ACM SIGSAC Conference on Computer and Communications Security (CCS)*, 2021. [link]

#### EXPERIENCES

#### Research Intern @ IMDEA Software

Madrid, Spain

Hosted by Prof. Juan Caballero and mentored by Dr. Srdjan Matic

Apr. 2024 - Aug. 2024

Large-scale measurement on disposable email ecosystem.

Summer Intern @ Purdue Hosted by Z. Berkay Celik West Lafayette, IN, USA (Remote)

June 2023 - Jan. 2024

Latency attack towards object detection (OD) system.

Research Assistant @ SJTU

Shanghai, China

Advisor: Prof. Haojin Zhu

Sept. 2020 - Mar. 2024

Compliance of VR APPs' privacy policies.

Behaviour-based de-anonymization attack in VR.

#### **TEACHING**

CSCI-UA.0202: Operating Systems (Undergrad)

NYU, Fall 2025

Instructor: Prof. Michael Walfish

CSCI-UA.0310: Basic Algorithms (Undergrad)

NYU, Summer 2025

Instructor: Prof. Areeba Ikram

CS7350: Network Security (Graduate)

SJTU, Spring 2023

Instructor: Prof. Haojin Zhu

#### HONORS AND AWARDS

• SOSP Student Travel Grant

ACM SIGOPS, 2024

• Graduated with Distinction

Graduate School of SJTU, 2024

• National Scholarship for Graduate Students (Top 1%)

Ministry of Education (China), 2023

• ACM CCS iMentor Student Travel Grant

ACM CCS, 2023

• Best Poster Award (Solely selected from all poster submissions)

IEEE INFOCOM, 2023

• First-Class Master's Academic Scholarship

Graduate School of SJTU, 2021-2023

• Zhiyuan Honors Degree of Engineering (Top 3%)

Zhiyuan College of SJTU, 2021

• Zhiyuan Honorary Scholarship (Top 5%)

Zhiyuan College of SJTU, 2017-2021

• Special Freshman Scholarship

SJTU, 2017

# **MISCELLANEOUS**

- Languages: Mandarin Chinese (native), English (professional fluency), Spanish (beginner).
- Stray animal rescuer and cat foster.
- Tennis, football (soccer), hiking.

Last updated: 2025-10-25