WEIGAO SU

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EDUCATION

Purdue University   *August 2022 - Present*
Ph.D. Student in Computer Science   GPA: 3.8/4

Hunan University   *September 2018 - June 2022*
B.Eng in Computer Science   GPA: 3.7/4, Top 3%

PUBLICATION

"Towards Device Independent Eavesdropping on Telephone Conversations with Built-in Accelerometer"
Weigao Su*, Daibo Liu, Taiyuan Zhang, Hongbo Jiang.
Proceedings of the ACM on IMWUT 5.4, 2021.

RESEARCH EXPERIENCE

Facilitating memory disaggregation via PHY   *Feburary 2023 – Present*
Supervised by Prof. Vishal Shrivastav (Purdue).

· Explored the use of IPG to carry cache management message.
· Integrated cache coherence and congestion control protocol into PHY layer.

OTFS-based broadband communication   *September 2022 – January 2023*
Supervised by Prof. Chunyi Peng (Purdue).

· Investigated the performance of TF domain channel estimation in high frequency band.
· Explored the feasibility of embedding OTFS pilots in current OFDM grid.

Optimizing Video Streaming for High-speed Rails   *July 2021 – May 2022*
Supervised by Prof. Daibo Liu (HNU), Jie Xiong (UMass).

· Modeled TCP measurements in high speed rails.
· Studied LTE behavior and current ABR algorithms with worsened channel quality.

Scalable Smartphone Eavesdropping over Accelerometer   *June 2020 – May 2021*
Supervised by Prof. Daibo Liu (HNU), Hongbo Jiang(HNU).

· Investigated potential gains/threats of motion sensors.
· Employed signal processing and feature engineering to achieve eavesdropping via accelerometer.

TEACHING

TA for CS240: C Programming   *Fall22*

HONORS AND AWARDS

First Prize in National College Student Information Security Contest   *2021*
National First Prize in RoboMaster University Series-*University Championship*   *2020*
National Second Prize in FILTRP English Public Speaking Contest   *2019*

SKILLS

Languages: Verilog, Python, P4, C/C++, JAVA, JavaScript.
Tools: Matlab, Docker, Git, SQL, Mininet, WireShark.