

Shuning Zhang



My research focuses on **usable security and privacy challenges within human-AI interaction**. I address these challenges by first investigating user perceptions, concerns, and expectations regarding these issues. This includes quantitatively understanding the influence of multifaceted factors, such as misinformation and privacy risks. Subsequently, I design and develop collaborative techniques to mitigate these identified problems.

Education

Tsinghua University

PhD. Student

Sep. 2023 – Present

Institute for Network Sciences and Cyberspace

Tsinghua University

Bachelor

Sep. 2019 – June. 2023

Computer Science and Technology

- Scholarship: National Scholarship (3/210), HAODUSHU Scholarship (1/210), ZHONGSHIMO Scholarship (3/210)

Internship Experience

Remote research assistant (Due to COVID19)

Proposed adaptive neural networks on physiological signals for emotion classification

Jun. 2022 - Aug. 2022

University of Washington

Remote research assistant (Due to COVID19)

Designed REACTGENIE, a typescript framework for developers to facilitate multimodal apps' building (CHI24)

Jun. 2022 - Aug. 2022

Stanford University

Remote research assistant (Due to COVID19)

Implemented template based NER model and benchmarked the model's transferability (ACL23)

Jun. 2021 - Aug. 2021

UCLA

Selected Publications

Exploring Collaboration Patterns and Strategies in Human-AI Co-creation Through the Lens of Agency: A Scoping Review of Top-tier HCI Literature

(CSCW25) **Shuning Zhang**, Hui Wang, Xin Yi

Actual Achieved Gain and Optimal Perceived Gain: Modeling Human Take-over Decisions Towards Automated Vehicles' Suggestions

(CHI25) **Shuning Zhang**, Xin Yi, Shixuan Li, Chuye Hong, Gujun Chen, Jiarui Liu, Xueyang Wang, Yongquan 'Owen' Hu, Yuntao Wang, Hewu Li

PrivCAPTCHA: Interactive CAPTCHA to Facilitate Effective Comprehension of APP Privacy Policy

(CHI25) **Shuning Zhang**, Xin Yi, Shixuan Li, Haobin Xing, Hewu Li

Synlab: A Spatio-Temporal Aggregation Framework for Collaborative Visual Misinformation Detection in Videos

(IJCAI25 Adjunct) **Shuning Zhang**, Linzhi Wang, Ruokai Zhao, Yiqun Xu, Yuanyuan Wu, Yabo Wang, Simin Li, Xin Yi, Hewu Li

Explainable AIGC Misinformation Video Identification Via Vision-based Language Models With Human-initiated Insights

(IJCAI25 Adjunct) **Shuning Zhang**, Yiqun Xu, Ruokai Zhao, Yuanyuan Wu, Yabo Wang, Linzhi Wang, Simin Li, Xin Yi, Hewu Li

IntervEEG-LLM: Exploring EEG-Based Multimodal Data for Customized Mental Health Interventions

(WWW25 Companion) **Shuning Zhang**, Yongquan 'Owen' Hu, Xin Yi, Suranga Nanayakkara, Xiaoming Chen

Evaluating the Privacy Valuation of Personal Data on Smartphones

(IMWUT24) Lihua Fan*, **Shuning Zhang***, Yan Kong, Xin Yi, Yang Wang, Xuhai 'Orson' Xu, Chun Yu, Hewu Li, Yuanchun Shi

Squeeze'In: Private Authentication on Smartphones based on Squeezing Gestures

(CHI23) Xin Yi, **Shuning Zhang**, Ziqi Pan, Louisa Shi, Fengyan Han, Yan Kong, Hewu Li, Yuanchun Shi

Exploring Large-Scale Language Models to Evaluate EEG-Based Multimodal Data for Mental Health

(Ubicomp24 Companion) Yongquan Hu, **Shuning Zhang**, Ting Dang, Hong Jia, Flora D. Salim, Wen Hu, Aaron J. Quigley

Towards Benchmarking and Assessing Visual Naturalness of Physical World Adversarial Attacks

(CVPR23) Simin Li, **Shuning Zhang**, Gujun Chen, Dong Wang, Pu Feng, Jiakai Wang, Aishan Liu, Xin Yi, Xianglong Liu

Exploring Voice Characteristics-based Deceptive Patterns

(In Submission) **Shuning Zhang**, Han Chen, Yabo Wang, Yiqun Xu, Jiaqi Bai, Yuanyuan Wu, Shixuan Li, Xin Yi, Hewu Li

ProChatter: In-Situ Resolution of Ambiguity in Querying Conversational AIs via Human-AI Co-Editing

(In Submission) **Shuning Zhang**, Shixuan Li, Jiarui Liu, Junrui Zhu, Maggie Shao, Dakuo Wang, Xin Yi, Hewu Li

Collab: Fostering Critical Video Misinformation Identification on Social Media via Synergistic Annotation

(In Submission) **Shuning Zhang**, Linzhi Wang, Shixuan Li, Yuanyuan Wu, Luoxi Chen, Xin Yi, Hewu Li

"Ghost of the Past": Resolving Privacy Leakage from Conversational Memory Through Proactive and Hierarchical Redaction

(In Submission) **Shuning Zhang**, Lvman Shan Ye, Jingyu Tang, Haobin Xing, Bo Shui, Shixuan Li, Kexin Nie, Pengfei Liu, Xin Yi, Hewu Li

Adanonymizer: User-centric Privacy-Utility Trade-off Control via a 2D Palette for Web-based LLM Interactions

(In Submission) **Shuning Zhang**, Haobin Xing, Shixuan Li, Lvman Shan Ye, Yongquan 'Owen' Hu, Kexin Nie, Xin Yi, Hewu Li

Technical Skills, Language Skills, and Interests

Programming Languages: Python, Javascript, Java, C Script

Language: Chinese (Native), English (GRE 332+5, Toefl 109)

Interests: Marathon, Chinese Folk Dance