

EDUCATION

Johns Hopkins University – Baltimore, MD

Sep. 2021 – Present

Ph.D. Electrical Engineering, Dept. of Electrical and Computer Engineering

Advisor: Dr. Rama Chellappa

Northwestern University – Evanston, IL

Sep. 2019 – May. 2021

MSC. Electrical Engineering, Dept. of Electrical and Computer Engineering

Graduate Thesis: Design of Formula Recognizer

Advisor: Dr. Ying Wu

University of Electronic Science and Technology of China – Chengdu, Sichuan

Sep. 2015 – May. 2019

B.Eng. Electronic Information Engineering, UESTC

B.Eng. Electronics and Electrical Engineering with Honors of First Class, University of Glasgow

Graduate Thesis: Research on Image Question Answering Based on Representations of Deep Convolutional Network

Advisor: Dr. Le Dong

SELECTED PROJECT/RESEARCH EXPERIENCE

Gait Recognition

Mar. 2022 – Present

Advisor: Dr. Rama Chellappa, Dept. of Electrical and Computer Engineering

- As a part of Biometric Recognition and Identification at Altitude and Range (BRIAR), built gait recognition pipeline to identify human from long range, i.e., 500m and aerial sensor platforms, i.e., 50°. Proposed [DME](#) is integrated as a part of [BRIAR](#) project.

Sparse view 3D Reconstruction

Sep. 2024 – Present

Advisor: Dr. Cheng Peng, Dept. of Electrical and Computer Engineering

- Developed a robust 3D scene reconstruction algorithm leveraging accurate camera pose information from SfM and dense point clouds from 3D geometry reconstruction methods, achieving high fidelity under challenging sparse view conditions.

Affective Computing with Reasoning

Feb. 2024 – May. 2024

Mentor: Dr. Shao-Yuan Lo, Honda Research Institute

- Utilized the prior knowledge of Large Language Model to integrate the language and visual clues and predict viewers' emotion when they watch a video; introduced spatiotemporal emotion stimuli and detailed explanations enhancing the interpretability and efficiency of the model.

PUBLICATIONS

Published

- Yuxiang Guo**, Anshul Shah, Jiang Liu, Ayush Gupta, Rama Chellappa, Cheng Peng. GaitContour: Efficient Gait Recognition based on a Contour-Pose Representation, *WACV*, 2025.
- Siyuan Huang, Ram Prabhakar, **Yuxiang Guo**, Rama Chellappa, Cheng Peng. Video-Image Learning to Learn Semantics for Person Re-Identification, *WACV*, 2025
- Yuxiang Guo**, Siyuan Huang, Ram Prabhakar, Chun Pong Lau, Rama Chellappa, Cheng Peng. Distillation-guided Representation Learning for Unconstrained Gait Recognition, *IJCB*, 2024. ([IAPR Best Biometrics Student Paper Award](#))
- Yuxiang Guo***, Cheng Peng*, Chun Pong Lau, Rama Chellappa. Multi-modal human authentication using silhouettes, gait and rgb, *FG*, 2023.

Under Review

- Yuxiang Guo**, Faizan Siddiqui, Yang Zhao, Rama Chellappa, Shao-Yuan Lo. StimuVAR: Spatiotemporal Stimuli-aware Video Affective Reasoning with Multimodal Large Language Models
- Yutao Tang*, **Yuxiang Guo***, Deming Li, Cheng Peng. SPARS3R: Semantic Prior Alignment and Regularization for Sparse 3D Reconstruction.
- Jiang Liu, Chen Wei, **Yuxiang Guo**, Heng Yu, Alan Yuille, Soheil Feizi, Chun Pong Lau, Rama Chellappa. Instruct2Attack: Language-Guided Semantic Adversarial Attacks

PROFESSIONAL EXPERIENCE

Graduate Research Assistant / Johns Hopkins University – Baltimore, MD

Sep. 2021 – Present

Research Intern / Honda Research Institute – San Jose, CA

Feb. 2024 – May. 2024

Graduate Research Assistant / Northwestern University – Evanston, IL

Jan. 2021 – Jun. 2021

AWARDS

- IAPR Best Biometrics Student Paper Award**, *IJCB* 2024
- First-Year Doctoral Fellowship**, ECE Dept., JHU 2021

PROFESSIONAL SERVICE

REVIEWER – AAAI, NeurIPS, ICML, ECCV, ICLR, ICCV, WACV, CVPR