Wenbin Teng

Curriculum Vitae



Education

Aug 2022 - University of Southern California, Los Angeles, CA,

May 2027 Ph.D. in Computer Science, Focus: Computer Vision and Computer Graphics, GPA 3.65/4.0.

Advisor: Yajie Zhao

Sep 2015 - **Boston University**, Boston, MA,

Jan 2019 B.A. in Statistics, B.A. in Economics, Magna Cum Laude, Dean's list (7 semesters), GPA: 3.77/4.0, Statistics Major GPA: 3.93/4.0.

Sep 2013 - Xi'an Jiaotong University, Xi'an, Shaanxi, China,

July 2015 Concentration in Finance, GPA: 83.8/100.

Publications

- 2025 Teng, W., Xiong, H., Xiao, H., Chen, G., Mithun, N.C., Wang, Q., Samarasekera, S., Kumar, R., Zhao, Y., "SRVD: Sparse View Scene Reconstruction with Video Diffusion Model", *In submission to CVPR* 2025
- 2025 Chen, G., Fu T., Chen, H., **Teng, W.**, Xiao, H., Zhao, Y., "RDD: Robust Feature Detector and Descriptor using Deformable Transformer", *In submission to CVPR 2025*
- Gao, Z., **Teng, W.**, Chen, G., Wu, J., Qin, R., Zhao, Y., "Skyeyes: Ground Roaming using Aerial View Images", arxiv preprint, 2024.
- 2024 Chen, G., Wu, J., Gao, Z., **Teng, W.**, Qin, R., Zhao, Y., "GeoAmplifier: Feature Matching Enhancement through Geometry-Aware Optimization," arxiv preprint, 2024.
- 2023 Yang, J., Xiao, H., **Teng, W.**, Cai, Y., Zhao, Y., "Light Sampling Field and BRDF Representation for Physically-based Neural Rendering," In The Eleventh International Conference on Learning Representations.
- 2021 **Teng, W.** and Bai, C., "Unimodal Face Classification with Multimodal Training," 2021 16th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2021), 2021, pp. 1-5, doi: 10.1109/FG52635.2021.9666965.

Experience

Aug 2022 - **Research Assistant**, *USC Institute for Creative Technologies*. Present

- Oct 2020 Research Intern, Department of Computer Vision Technology, Baidu Inc..
 - Mar 2021 Proposed an image-to-image translation framework for unsupervised domain adaptation on cross-database face anti-spoofing.
- May 2020 Research Intern, Johns Hopkins University CCVL Lab, Advisor: Alan Yuille.
 - Oct 2020 Researched on model-based face autoencoder for 3D face rendering.
 - Performed iterative adversarial attack on the autoencoder through perturbation optimization.

- Jan 2020 Research Assistant, Dartmouth College, Advisor: Chongyang Bai.
- Aug 2021 Proposed a multimodal training and unimodal testing (MTUT) framework on face classification task.
 - Constructed a first-author research paper and published in IEEE FG 2021.
- Jan 2018 Research Assistant, Boston University, Advisor: Allen G. Harbaugh.
- Aug 2018 Conducted research on patterns of model selection protocols such as Mallow's *Cp* and information criteria with simulated data.
 - Presented primary experiment result in Modern Modelling Methods (MMM) Conference 2018; presented project poster in Boston University Undergraduate Research Opportunity Program (UROP) symposium.

Teaching

- Aug 2022 University of Southern California, Teaching Assistant.
 - Dec 2022 Introduction to Programming in C++ (CSCI 103L). Instructor: Prof. Mark Redekopp.
- Jan 2023 University of Southern California, Teaching Assistant.
- May 2023 O Database Systems (CSCI 585). Instructor: Prof. Saty Raghavachary.
- Aug 2024 University of Southern California, Teaching Assistant.
 - Dec 2023 Introduction to Artificial Intelligence (CSCI 360). Instructor: Prof. Mohammad Reza Rajati.

Honors & Awards

- 2019 Magna Cum Laude, Boston University
- 2015 2018 Dean's List, Boston University
 - 2018 UROP Stipends Award, Boston University

Skills & Interests

- Programming Python, R, Java, Linux, C++, SQL, VBA, MATLAB, LATEX, Unix
 - Frameworks PyTorch, Tensorflow, Keras, PaddlePaddle
 - Utilities Anaconda, Git, Jupyter Notebook
 - Languages Mandarin (Native), English (Fluent)
 - Interests Badminton, Fitness, Cooking

Relevant Courses

- USC 3D Rendering and Graphics, Advanced Analysis of Algorithms, Advanced Computer Vision, Mathematics of High-Dimensional Data
- Boston Machine Learning, Probability, Computational Statistics, Data Science in R, Mathematical Statistics, University Introduction to Stochastic Processes, Time Series and Forecasting, Linear Models, Applied Multiple Regression and Multivariate Methods.