Yixuan Li

EDUCATION

Georgia Institute of Technology, United States

Sept. 2023- Now

- Ph.D. in Human-Centered Computing at College of Computing
- Cumulative GPA: 4.0/4.0
- Research Topics: Data Literacy, Informal Learning, Learning Science and Technology, Personal Fabrication, Generative AI for education.

University of California, Santa Barbara, United States

Sept. 2021- Jun. 2023

- Master of Science in Media Arts and Technology
- Cumulative GPA: 4.0/4.0
- Research Topics: Data Visualization, Technology for Museum, HCI, Computational Aesthetics
- Teaching Assistant: Data Visualization (MAT 259), Computational Aesthetics (MAT 255), Image Synthesis with Text2Img Tools (MAT 255), Media Signal Processing (MAT 201A).

Fudan University, Shanghai, China

Sept. 2017- Jun. 2021

- Bachelor of Science in Data Science and Big Data Technology
- Coursework: Machine Learning, Artificial Intelligence, Deep Learning, Data Visualization, Data Analysis, Museum Informatic, Formal Design of Museum Display
- Award: Undergraduate Outstanding Scholarship, Undergraduate Professional Scholarship in STEM Major, Mathematical Contest in Modeling Honorable Mention Prize

PUBLISHED WORK AND AWARD

- Yixuan Li et. al. Equivalence: An analysis of artists' roles with Image Generative AI from Conceptual Art perspective through an interactive installation design practice. Generative AI and HCI workshop at CHI (GenAICHI 2024), Accepted, May 11, 2024, Honolulu, Hawai'i.
- Yixuan Li et. al. Diverse Interaction Recommendation for Public Users Exploring Multi-view Visualization using Deep Learning. IEEE Transactions on Visualization and Computer Graphics (VIS'22), Oct 16-21, 2022, Oklahoma, USA.
- Yixuan Li et. al. HoagsOLife: A Visualization of the Life Story of Dongpo. Winner of 2021 IEEE PacificVis Visual Data Storytelling Contest, Apr 19-22, 2021, Tianjin, China.
- Yixuan Li. Analysis of the Application of Image Recognition in the Field of Museum Digital Content. Benevolence and Excellence: Digital Humanities and Chinese Culture (CDH 2020) Oct 19-21, 2020, Shanghai, China.
- Yixuan Li et. al. Finding the Key Factors for Movie Influence Using Machine Learning and Sentiment Analysis. 2nd International Conference on Machine Learning, Big Data and Business Intelligence (MLBDBI 2020) October 23-25, 2020, Chengdu, China.

PRESENTATION AND EXHIBITION

- CHI 2024: GenAICHI 2024 Workshop, May 11, 2024, Honolulu, Hawai'i.
- **SPARKS:** Short Presentation of Artworks & Research for the Kindred Spirit by ACM SIGGRAPH Digital Arts Committee. December 9, 2022.
- **IEEE VIS22:** Visualization & Visual Analysis, VA and ML, Full Paper Session by IEEE, Oct 16-21, 2022, Oklahoma, USA.

- ChinaVis22: The China Visualization and Visual Analytics Conference, Visualization for Public Education, July 22-25, 2022 Xining, China.
- PacificVis21: The 14th IEEE Pacific Visualization Symposium, Visual Data Storytelling Contest, Apr 19-22, 2021, Tianjin, China.

RESEARCH EXPERIENCE

Data Visualizations for Promoting Data Literacy

Sept. 2023 - Present

Graduate Researcher, Advisor: Dr. Jessica Roberts, TILES Lab, Georgia Tech

- Design and develop public Kiosk display of Air Quality Index Data that supports organic Human-Data-Interaction with visualization systems in informal learning set-up.
- Co-Design and lead the Data Visualization and Environment summer camp with teachers for middle schoolers in Atlanta scaffolding self-directed data exploration.

Visualization and Computational Aesthetics

Sept. 2021 - Present

Graduate Researcher, Advisor: George Legrady, Experimental Visualization Lab, UCSB.

- Research on 3D visual representations of cross-modal data including audio, speech and text.
- Created an art installation that converts audience speech input to architectures in 3D space in real-time using deep learning in Panda3D. The work was submitted to ISEA2023.
- Design and instruct courses on Computational Aesthetics and Data Visualization, covering topics on computer vision, text2img algorithms and tools, and 3D data visualization using Processing.

Data Visualization For The Mass

Sept. 2020 – Sept. 2021

Research Assistant, Advisor: Dr. Siming Chen, FDU-VIS, Fudan University.

- Researched on how to promote knowledge accessibility to novice users using data visualization.
- Developed a data visualization system inspired by Hoag's Object to present Su Dongpo's life story using D3.js. The corresponding video won the Storytelling Contest of IEEE PacificVis'21.
- Conducted a working pipeline that provides interaction recommendations for public users using multi-view visualization in public education scenarios. The work was accepted by IEEE VIS22.

Posters' layout automatically design system with AI and CVJuly 2020 – Nov. 2020

Research Assistant, Advisor: Dr. Ling Fan, Design & AI Lab, Tongji University.

- Developed a Reinforcement Learning framework that resembled the actual designing process and used a Graph Convolutional Network for the purpose of layers' positions initialization.
- Built aesthetic evaluation functions with reference to design theories to extract layout features and constructed an aesthetic evaluation model as a step-out condition for RL generation process
- Developed and packaged the template of particle, material, and lighting effects with the help of Unreal Engine 4 to make 3D development easier and more convenient for general designers.

SKILLS AND INTERESTS

Language: English, Chinese

Program: Python | R | C | C# | JavaScript | D3.js | Processing | MATLAB | PyTorch | TensorFlow **Tool:** Unity | Unreal Engine | Tableau | TouchDesigner | Blender | Rhino | Max/MSP | Arduino **Certificate:** Machine Learning Certificate by Andrew Ng