

Yihan Hou

Ph. D Student, HKUST CIVAL

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Research Interest and Focus

My research is centered around the interplay of Human Perception and Artificial Intelligence, with a particular interest in applying the research in Visualization and Computational Design. I'm actively exploring the application of state-of-the-art techniques in design practices, such as Large Language Models (LLMs), to facilitate the design process. My primary objectives include molding design guidelines rooted in a broad understanding of visualization, integrating domain expertise, and employing advanced technology to foster user-centric designs.

Education

The Hong Kong University of Science and Technology(Guangzhou)

Ph.D. in Computational Media and Arts

Member of HKUST CIVAL, supervised by Prof. Wei Zeng

Guangzhou, China

Sep. 2022 - Present

Xi'an Jiaotong-Liverpool University

B.Sc. in Information and Computing Science (First Class Honours)

Member of xrVis Lab (XJTLU Visualization Research Group), supervised by Prof. Lingyun Yu

Suzhou, China

Sep. 2018 - Jul. 2022

Liverpool University

B.Sc. in Information and Computing Science (First Class Honours)

Liverpool, UK

Sep. 2018 - Jul. 2022

Publications

JOURNAL ARTICLES

- W. Zeng, X. Chen, **Y. Hou**, L. Shao, Z. Chu, and R. Chang. "Semi-Automatic Layout Adaptation for Responsive Multiple-View Visualization Design". IEEE Transactions on Visualization and Computer Graphics, 2023.
- Y. Hou**, H. Zhu, H.-N. Liang, and Yu, L. "A Study of the Effect of Star Glyph Parameters on Value Estimation and Comparison". Journal of Visualization, 2022.
- S. Xiao, **Y. Hou**, C. Jin, and W. Zeng, "WYTIWYR: A User Intent-Aware Framework with Multi-modal Inputs for Visualization Retrieval," Computer Graphics Forum (Proceedings of EuroVis'23), 2023.

CONFERENCE PROCEEDINGS

- Y. Hou**, Y. Liu, H. Wang, Z. Zhang, Y. Li, H.-N. Liang, and Yu, L. "DARC: A Visual Analytics System for Multivariate Applicant Data Aggregation, Reasoning and Comparison". Pacific Graphics 2022. Kyoto, Japan, 2022.

Awards & Certificates

2021	Certificate of Summer Undergraduate Research Fellow,	Suzhou, China
2019-2021	XJTLU Academic Achievement Scholarship, for top 10 % students for 3 consecutive years	Suzhou, China
2020	Best Prize, 2020 Emerson Virtual Internship	Suzhou, China
2018	Certificate of Achievement, 2018 XJTLU Entrepreneurship New Transport Experience Hackathon	Suzhou, China

Talks

Sep. 2022	DARC: A Visual Analytics System for Multivariate Applicant Data Aggregation, Reasoning and Comparison, Pacific Graphics'22	Virtual
Jul. 2022	A Study of the Effect of Star Glyph Parameters on Value Estimation and Comparison, ChinaVis'22	Qinghai, China

Skills

Programming JavaScript (Vue.js, D3.js, Vega-Lite) | HTML/CSS | Java | Python | C++ (OpenGL) | C# (Unity) | Android | SQL | Unreal Engine
Design Human-Centric Design | Cinema4D(3D modeling) | Tableau | Adobe Illustrator | Video Clips.

References available upon request.