

ZHUTIAN CHEN • CURRICULUM VITAE

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RESEARCH INTERESTS

Data Visualization, Human-Computer Interaction, Augmented Reality, Machine Learning.

To help people leverage immersive technologies (AR, VR) for data analysis and communication, I study the design, creation, and application of visualizations in immersive environments, by combining methods from data visualization, computer graphics / vision, machine learning, and human-computer interaction.

EDUCATION

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|-------------------|---|
| 09/2015 - Present | Hong Kong University of Science & Technology , Kowloon, Hong Kong
Ph.D. Candidate in Computer Science & Engineering
Advisor: Huamin Qu
Awarded Hong Kong Ph.D. Fellowship |
| 09/2011 - 07/2015 | South China University of Technology , Guangzhou, China
B.S. in Software Engineering
Advisor: Yi Cai
Awarded Pacemaker to Merit Student, the Highest Honor (top 0.01%) |

POSITIONS

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| 09/2015 - Present | Hong Kong University of Science & Technology , Kowloon, Hong Kong
Graduate Researcher - VISLab
Advisor: Huamin Qu |
| 09/2019 - 12/2019 | The University of Edinburgh , Edinburgh, UK
Research Visiting Student - Design Informatics
Advisor: Benjamin Bach |
| 08/2017 - 11/2017 | ByteDance , Beijing, China
Software Engineering Intern - Big Data Platform Group
Advisor: Liang Tang |
| 06/2017 - 08/2017 | FIT Future Information Technology , Beijing, China
Research Intern - SLAM Group
Advisor: Kaidi Zhou |
| Spring/2015, 2017 | State Key Lab of CAD&CG , Hangzhou, China
Research Assistant - ZJU VIS
Advisor: Yingcai Wu |
| 06/2014 - 01/2015 | Microsoft Research Asia , Beijing, China
Research Intern - Internet Graphics Group
Advisor: Yingcai Wu |

PEER REVIEWED PUBLICATIONS

TO-BE-SUBMITTED

- 2020 Qianwen Wang, Zhenhua Xu, **Zhutian Chen**, Yong Wang, Shixia Liu, and Huamin Qu. “Visual Analysis of Discrimination in Machine Learning.” *IEEE InfoVis’20*

PUBLISHED

- 2019 C7 **Zhutian Chen**, Wai Tong, Qianwen Wang, Benjamin Bach, and Huamin Qu. “Augmenting Static Visualizations with PapARVis Designer.” *ACM Conference on Human Factors in Computing Systems (CHI’20)*. – 24% acceptance rate, 10 pages
- C5, J5 **Zhutian Chen**, Yun Wang, Qianwen Wang, Yong Wang, and Huamin Qu. “Towards Automated Infographic Design: Deep Learning-based Auto-Extraction of Extensible Timeline.” *IEEE Transactions on Visualization and Computer Graphics (InfoVis’19)*. – 24% acceptance rate, 10 pages
- C4, J4 **Zhutian Chen**, Wei Zeng, Zhiguang Yang, Lingyun Yu, Chi-Wing Fu, and Huamin Qu. “LassoNet: Deep Lasso-Selection of 3D Point Clouds.” *IEEE Transactions on Visualization and Computer Graphics (SciVis’19)*. – 25% acceptance rate, 10 pages
- 2018 J3 **Zhutian Chen**, Yijia Su, Yifang Wang, Qianwen Wang, Huamin Qu, Yingcai Wu. “MARVisT: Authoring Glyph-based Visualization in Mobile Augmented Reality.” *IEEE Transactions on Visualization and Computer Graphics (TVCG)*.
- 2017 J2 **Zhutian Chen**, Yifang Wang, Tianchen Sun, Xiang Gao, Wei Chen, Zhigeng Pan, Huamin Qu, Yingcai Wu. “Exploring the Design Space of Immersive Urban Analytics.” *Journal of Visual Informatics (JVI)*.
- J1 Yingcai Wu, **Zhutian Chen**, Guodao Sun, Xiao Xie, Nan Cao, Shixia Liu, Weiwei Cui. “StreamExplorer: A Multi-Stage System for Visually Exploring Events in Social Streams.” *IEEE Transactions on Visualization and Computer Graphics (TVCG)*.
- W1 **Zhutian Chen**, Huamin Qu, Yingcai Wu. “Immersive Urban Analytics through Exploded Views.” *IEEE VIS 2017 Workshop on Immersive Analytics*.
- 2016 C3 Yun Wang, **Zhutian Chen**, Quan Li, Xiaojuan Ma, Qiong Luo, Huamin Qu. “Animated Narrative Visualization for Video Clickstream Data.” *ACM SIGGRAPH ASIA Visualization Symposium (SIGGRAPH ASIA)*.
- C2 Mingqian Zhao, **Zhutian Chen**, Ke Lu, Chaoran Li, Huamin Qu, Xiaojuan Ma. “Blossom: Design of a Tangible Interface for Improving Intergenerational Communication for the Elderly.” *ACM Interactive Technology and Ageing Populations (ITAP)*.
- C1 Yun Wang, Tongshuang Wu, **Zhutian Chen**, Qiong Luo, Huamin Qu. “STAC: Enhancing Stacked Graphs for Time Series Analysis.” *IEEE Pacific Visualization Symposium (PacificVis)*.

AWARDS AND HONORS

2019 - 2020	Overseas Research Award Hong Kong University of Science & Technology
2019 - 2020	Research Travel Grant Hong Kong University of Science & Technology
2018 - 2019	Research Travel Grant Hong Kong University of Science & Technology
08/2016	First Prize of the Design Thinking China Academy of Art, Hong Kong University of Science & Technology
2015 - 2019	Hong Kong Ph.D. Fellowship (HKPFS) Research Grants Council of Hong Kong
01/2015	Award of Excellence Microsoft Research Asia
2013 - 2014	Pacemaker to Merit Student South China University of Technology, the highest honor (top 0.1%)
2013 - 2014	National Scholarship Ministry of Education of the People's Republic of China
04/2014	Meritorious Winner of Interdisciplinary Contest in Modeling Consortium for Mathematics and Its Applications, USA
2013 - 2014	Tencent Technology Excellence Scholarship Tencent Holdings Limited
2012 - 2013	National Scholarship Ministry of Education of the People's Republic of China
2011 - 2012	National Scholarship for Encouragement Ministry of Education of the People's Republic of China

INVITED TALKS

	Towards Futuristic Visual StoryTelling: Authoring Data-Driven Infographics in Augmented Reality
01/2020	Shandong University, Qingdao, China
11/2019	The University of Edinburgh, Edinburgh, UK
07/2019	Zhejiang Lab, Hangzhou, China
	Towards Automated Infographic Design: Deep Learning-based Auto-Extraction of Extensible Timeline
10/2019	IEEE VIS'19, Vancouver, Canada
	MARVisT: Authoring Glyph-based Visualization in Mobile Augmented Reality
10/2019	IEEE VIS'19, Vancouver, Canada

10/2019	LassoNet: Deep Lasso-Selection of 3D Point Clouds IEEE VIS'19, Vancouver, Canada
10/2019	InfoVis in Augmented Reality ARVis Meet-up@Microsoft, Vancouver, Canada
10/2018	StreamExplorer: A Multi-Stage System for Visually Exploring Events in Social Streams IEEE VIS'18, Berlin, Germany
12/2016	Animated Narrative Visualization for Video Clickstream Data Visualization Symposium at ACM SIGGRAPH ASIA'16, Macao, China

TEACHING

TEACHING

Fall/2018	Teaching Assistant , COMP2711: Discrete Mathematical Tools for Computer Science, HKUST.
Spring/2018	Teaching Assistant , COMP4901f: Data Visualization, HKUST.

MENTORING

Summer/2019	Wai Tong (M.Phil. at HKUST): [C7].
Spring/2019	Zhiguang Yang (M.S. at SIAT, Chinese Academy of Sciences): [C4, J4].
2017 - 2018	Yifang Wang (Ph.D. at HKUST): [J3, J2].
Spring/2017	Tianchen Sun (B.S. at ZJU, now Ph.D. at UC Davis with Kwan-Liu Ma): [J2].
Spring/2017	Xiang Gao (M.S. at ZJU): [J2].
2016 - 2017	Zhen Li (M.Phil at HKUST): E-learning Project.
2016 - 2017	Shaozu Cao (Ph.D. at HKUST): E-learning Project.

SERVICE

2020	Paper Reviewer , CG&A (IEEE Computer Graphics and Applications)
2020	Paper Reviewer , CHI (ACM Conference on Human Factors in Computing Systems)
2019	Paper Reviewer , PacificVis
2019	Paper Reviewer , TOG (ACM Transactions on Graphics)
2019	Paper Reviewer , VRST (ACM Virtual Reality Software and Technology)
2019	Paper Reviewer , ChinaVis
2019	Paper Reviewer , VIS (IEEE Visualization Conference)
2018	Paper Reviewer , VIS (IEEE Visualization Conference)

REFERENCE

Huamin Qu

Professor of Computer Science
Hong Kong University of Science & Technology
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Yingcai Wu

ZJU100 Young Professor of Computer Science
Zhejiang University
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Benjamin Bach

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the University of Edinburgh
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