

# ZHUTIAN CHEN • CURRICULUM VITAE

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## RESEARCH INTERESTS

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

To help people leverage the best of both physical and digital worlds, I develop techniques and tools to facilitate the creation of information visualizations in and for AR environments, by combining methods from data visualization, machine learning, and human-computer interaction.

## EDUCATION

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|-------------------|---|
| 09/2015 - Present | <b>Hong Kong University of Science &amp; Technology</b> , Kowloon, Hong Kong<br>Ph.D. Candidate in Computer Science & Engineering<br>Advisor: Huamin Qu<br>Awarded Hong Kong Ph.D. Fellowship |
| 09/2011 - 07/2015 | <b>South China University of Technology</b> , Guangzhou, China<br>B.S. in Software Engineering<br>Advisor: Yi Cai<br>Awarded Pacemaker to Merit Student, the Highest Honor (top 0.1%)         |

## POSITIONS

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

## PEER REVIEWED PUBLICATIONS

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| 2020 | C7     | <b>Zhutian Chen</b> , Wai Tong, Qianwen Wang, Benjamin Bach, and Huamin Qu. “Augmenting Static Visualizations with PapARVis Designer.” <i>ACM Conference on Human Factors in Computing Systems (CHI’20)</i> .  |
| 2019 | C5, J5 | <b>Zhutian Chen</b> , Yun Wang, Qianwen Wang, Yong Wang, and Huamin Qu. “Towards Automated Infographic Design: Deep Learning-based Auto-Extraction of Extensible Timeline.” <i>IEEE Transactions on Visualization and Computer Graphics (InfoVis’19)</i> . |
|      | C4, J4 | <b>Zhutian Chen</b> , Wei Zeng, Zhiguang Yang, Lingyun Yu, Chi-Wing Fu, and Huamin Qu. “LassoNet: Deep Lasso-Selection of 3D Point Clouds.” <i>IEEE Transactions on Visualization and Computer Graphics (SciVis’19)</i> .                                  |
| 2018 | J3     | <b>Zhutian Chen</b> , Yijia Su, Yifang Wang, Qianwen Wang, Huamin Qu, Yingcai Wu. “MARVisT: Authoring Glyph-based Visualization in Mobile Augmented Reality.” <i>IEEE Transactions on Visualization and Computer Graphics (TVCG)</i> .                     |
| 2017 | J2     | <b>Zhutian Chen</b> , Yifang Wang, Tianchen Sun, Xiang Gao, Wei Chen, Zhigeng Pan, Huamin Qu, Yingcai Wu. “Exploring the Design Space of Immersive Urban Analytics.” <i>Journal of Visual Informatics (JVI)</i> .  |
|      | J1     | Yingcai Wu, <b>Zhutian Chen</b> , Guodao Sun, Xiao Xie, Nan Cao, Shixia Liu, Weiwei Cui. “StreamExplorer: A Multi-Stage System for Visually Exploring Events in Social Streams.” <i>IEEE Transactions on Visualization and Computer Graphics (TVCG)</i> .  |
|      | W1     | <b>Zhutian Chen</b> , Huamin Qu, Yingcai Wu. “Immersive Urban Analytics through Exploded Views.” <i>IEEE VIS 2017 Workshop on Immersive Analytics</i> .  |
| 2016 | C3     | Yun Wang, <b>Zhutian Chen</b> , Quan Li, Xiaojuan Ma, Qiong Luo, Huamin Qu. “Animated Narrative Visualization for Video Clickstream Data.” <i>ACM SIGGRAPH ASIA Visualization Symposium (SIGGRAPH ASIA)</i> .  |
|      | C2     | Mingqian Zhao, <b>Zhutian Chen</b> , Ke Lu, Chaoran Li, Huamin Qu, Xiaojuan Ma. “Blossom: Design of a Tangible Interface for Improving Intergenerational Communication for the Elderly.” <i>ACM Interactive Technology and Ageing Populations (ITAP)</i> . |
|      | C1     | Yun Wang, Tongshuang Wu, <b>Zhutian Chen</b> , Qiong Luo, Huamin Qu. “STAC: Enhancing Stacked Graphs for Time Series Analysis.” <i>IEEE Pacific Visualization Symposium (PacificVis)</i> .   |

## AWARDS AND HONORS

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| 2019 - 2020 | <b>Overseas Research Award</b><br>Hong Kong University of Science & Technology                                  |
| 08/2016     | <b>First Prize of the Design Thinking</b><br>China Academy of Art, Hong Kong University of Science & Technology |

2015 - 2019	<b>Hong Kong Ph.D. Fellowship (HKPFS)</b> Research Grants Council of Hong Kong
01/2015	<b>Award of Excellence</b> Microsoft Research Asia
2013 - 2014	<b>Pacemaker to Merit Student</b> South China University of Technology, the highest honor (top 0.1%)
2013 - 2014	<b>National Scholarship</b> Ministry of Education of the People's Republic of China
04/2014	<b>Meritorious Winner of Interdisciplinary Contest in Modeling</b> Consortium for Mathematics and Its Applications, USA
2013 - 2014	<b>Tencent Technology Excellence Scholarship</b> Tencent Holdings Limited
2012 - 2013	<b>National Scholarship</b> Ministry of Education of the People's Republic of China
2011 - 2012	<b>National Scholarship for Encouragement</b> Ministry of Education of the People's Republic of China

## INVITED TALKS

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	<b>Towards Futuristic Visual StoryTelling: Authoring Data-Driven Infographics in Augmented Reality</b>
11/2019	The University of Edinburgh, Edinburgh, UK
07/2019	Zhejiang Lab, Hangzhou, China
	<b>Towards Automated Infographic Design: Deep Learning-based Auto-Extraction of Extensible Timeline</b>
10/2019	IEEE VIS'19, Vancouver, Canada
	<b>MARVisT: Authoring Glyph-based Visualization in Mobile Augmented Reality</b>
10/2019	IEEE VIS'19, Vancouver, Canada
	<b>LassoNet: Deep Lasso-Selection of 3D Point Clouds</b>
10/2019	IEEE VIS'19, Vancouver, Canada
	<b>StreamExplorer: A Multi-Stage System for Visually Exploring Events in Social Streams</b>
10/2018	IEEE VIS'18, Berlin, Germany
	<b>Animated Narrative Visualization for Video Clickstream Data</b>
12/2016	Visualization Symposium at ACM SIGGRAPH ASIA'16, Macao, China

## TEACHING

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

## SERVICE

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- 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

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**Huamin Qu**

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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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