

# Zikun Deng

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## EDUCATION

### Zhejiang University

- Computer Science · PhD State Key Lab of CAD & CG
  - Supervisor: Prof. Yingcai Wu
  - Research: Spatiotemporal Data Analytics, Data Visualization, Smart City
  - Thesis: Visual Propagation Analytics of Urban Spatiotemporal Event

2018.09 – 2023.06

### Sun Yat-sen University

- Transportation Engineering · BEng, School of Intelligent Systems Engineering 2014.08 – 2018.06

## EXPERIENCE

### South China University of Technology

- Associate Professor, School of Software Engineering 2023.08 – present

### Zhejiang Lab

- Research Intern, Big Data Intelligence Research Center 2019.04 – 2021.04
  - Supervisors: Prof. Yingcai Wu and Prof. Wei Chen

### JD Tech

- Research Intern, iCity 2018.04 – 2018.09
  - Supervisors Prof. Yu Zheng and Dr. Jie Bao

### Zhejiang University

- Research Intern, State Key Lab of CAD & CG 2018.01 – 2018.04
  - Supervisor: Prof. Yingcai Wu

## PUBLICATIONS

### FIRST-AUTHOR

- [1] **Z. Deng**, S. Chen, T. Schreck, D. Deng, T. Tang, M. Xu, D. Weng, and Y. Wu. “*Visualizing Large-Scale Spatial Time Series with GeoChron*.” IEEE Transactions on Visualization and Computer Graphics, Online, 2023.
- [2] **Z. Deng**, S. Chen, X. Xiao, G. Sun, M. Xu, D. Weng, and Y. Wu. “*Multilevel Visual Analysis of Aggregate Geo-Networks*.” IEEE Transactions on Visualization and Computer Graphics, Online, 2022.
- [3] **Z. Deng**, D. Weng, S. Liu, Y. Tian, M. Xu, and Y. Wu. “*A Survey of Urban Visual Analytics: Advances and Future Directions*.” Computational Visual Media, vol. 9, no. 1, pp. 3–39, 2023.
- [4] **Z. Deng**, D. Weng, and Y. Wu. “*You are Experienced: Interactive Tour Planning with Crowdsourcing Tour Data from Web*.” Journal of Visualization, vol. 26, no. 2, pp. 385–401, 2023.
- [5] **Z. Deng**, D. Weng, Y. Liang, J. Bao, Y. Zheng, T. Schreck, M. Xu, and Y. Wu. “*Visual Cascade Analytics of Large-scale Spatiotemporal Data*.” IEEE Transactions on Visualization and Computer Graphics, vol. 28, no. 6, pp. 2486–2499, 2022.
- [6] **Z. Deng**, D. Weng, X. Xie, J. Bao, Y. Zheng, M. Xu, W. Chen, and Y. Wu. “*Compass: Towards Better Causal Analysis of Urban Time Series*.” IEEE Transactions on Visualization and Computer Graphics (Proc. of IEEE VIS 2021), vol. 28, no. 1, pp. 1051–1061, 2022.
- [7] **Z. Deng**, D. Weng, J. Chen, R. Liu, Z. Wang, J. Bao, Y. Zheng, and Y. Wu. “*AirVis: Visual Analytics of Air Pollution Propagation*.” IEEE Transactions on Visualization and Computer Graphics (Proc. of IEEE VIS 2019), vol. 26, no. 1, pp. 800–810, 2020.

### NON-FIRST-AUTHOR

- [8] S. Liu, D. Weng, Y. Tian, **Z. Deng**, H. Xu, X. Zhu, H. Yin, X. Zhan, and Y. Wu. “*ECoalVis: Visual Analysis of Control Strategies in Coal-fired Power Plants*.” IEEE Transactions on Visualization and Computer Graphics (Proc. of IEEE VIS 2022), vol. 29, no. 1, pp. 1091–1101, 2023.
- [9] Y. Wang, H. Liang, X. Shu, J. Wang, K. Xu, **Z. Deng**, C. Campbell, B. Chen, Y. Wu, and H. Qu. “*Interactive Visual Exploration of Longitudinal Historical Career Mobility Data*.” IEEE Transactions on Visualization and Computer Graphics, vol. 28, no. 10, pp. 3441–3455, 2022.

- [10] D. Weng, C. Zheng, **Z. Deng**, M. Ma, J. Bao, Y. Zheng, M. Xu, and Y. Wu. “*Towards Better Bus Networks: A Visual Analytics Approach.*” IEEE Transactions on Visualization and Computer Graphics (Proc. of IEEE VIS 2020), vol. 27, no. 2, pp. 817–827, 2021.
- [11] Y. Wu, D. Weng, **Z. Deng**, J. Bao, M. Xu, Z. Wang, Y. Zheng, Z. Ding, and W. Chen. “*Towards Better Detection and Analysis of Massive Spatiotemporal Co-occurrence Patterns.*” IEEE Transactions on Intelligent Transportation Systems, vol. 22, no. 6, pp. 3387–3402, 2022.
- [12] D. Weng, R. Chen, **Z. Deng**, F. Wu, J. Chen, and Y. Wu. “*SRVis: Towards Better Spatial Integration in Ranking Visualization.*” IEEE Transactions on Visualization and Computer Graphics (Proc. of IEEE VIS 2018), vol. 25, no. 1, pp. 459–469, 2019.

## AWARDS

- Outstanding Graduate Student of Zhejiang University 2023
- National Scholarship 2015 & 2022
- Luzengyong CAD & CG High Tech Award 2022
- Style 3D Fellowship 2021
- Zhejiang University Doctoral Scholarship 2018
- Merit Graduate Student of Zhejiang University 2019 & 2022

## SERVICE

### Peer Reviewer

- IEEE Transactions on Visualization and Computer Graphics
- IEEE VIS 2020, 2021, 2022, 2023
- ACM CHI, 2024
- PacificVis 2024
- Journal of Visualization
- ChinaVis 2020, 2022

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