Weilian Li

Gender: Male Date of Birth: 2nd July 1993

Degree: Doctor Native Place: Sichuan Dazhou

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Education

Feb. 2020- At present	HafenCity University Hamburg	Guest Researcher: Geovisualization
Sep. 2016- Dec. 2020	Southwest Jiaotong University	Ph.D.: Geomatics Science and Technology
Sep. 2015- Jun. 2016	Southwest Jiaotong University	M.S.: Geomatics Science and Technology
Sep. 2011- Jun. 2015	Tianjin Chengjian University	B.S.: Surveying and Mapping Engineering

Research Experience

- **Fusion and augmented visualization of large-scale and complex disaster scenes**
  Sponsor: National Key Research and Development Program of China **2016.07-2020.12**
- **Task-driven adaptive visualization method of disaster scenes**
  Sponsor: National Natural Science Foundation of China **2019.01-2022.12**
- **Users need oriented fusion visualization method of disaster scenes**
  Sponsor: Doctoral Innovation Fund Program of Southwest Jiaotong University **2019.05-2020.05**

Responsibilities: As a primary researcher in these projects, I am responsible for project proposal, visualization of disaster scenes, spatiotemporal process simulation, spatial cognition and the implement of a disaster visualization system

Achievements: Four international journal papers, one international conference paper and four Chinese journal papers have been published as the first author/Correspondence, Three national invention patents of China have been applied.

Honors/Awards/Scholarships

- Early Career Research Paper Prize of the 6th National Conference on VGE **2017.11**
- The Cultivation Target for Top Innovation Talents of SWJTU **2018.03**
- MingCheng Prize of SWJTU **2018.10**
- HI-TARGET Prize of SWJTU **2018.12**
- The Cultivation Program for the Innovative Doctoral Dissertation of SWJTU **2019.05**
- National Scholarship for Doctoral Students **2019.10**
- Upcoming youngster of GIS **2020.11**

Academic/Community Activities

- **Li W.L.**, Zhu J. Display and Interaction of Disaster Scene for Mobile Virtual Reality. *The 25th International Conference on Geoinformatics*. Buffalo, USA, 2017.(Oral Presentation)
- **Li W.L.**, Zhu J. A Fusion Modeling and Interaction Method with Spatial Semantic Constraint for Debris Flow VR Scene. *The 25th International Conference on Geoinformatics*. Kunming, China, 2018.(Oral Presentation)
- **Li W.L.**, Zhu J. Disaster Scene Fusion Modeling and Visualization Method for Emergency in the Network Environment. *The 6th National Conference on VGE*. Chengdu, China, 2017.(Oral Presentation)
- **Li W.L.** Modeling and Visual Analysis of Typical Disasters in Virtual Geographic Environment. Bonn, Germany, 2018.(Short Exchange)
- **Li W.L.**, Zhu J. A Fusion Visualization Method for Disaster Information Based on Self-Explanatory Symbols and Photorealistic Scene Cooperation. *1st Regional Conference on Environmental Modeling and Software*. Nanjing, China, 2019.(Oral Presentation)

- Zhang Y.H., Zhu J., **Li W.L.**, et al. Optimized Organization and Adaptive Visualization of Complicated Mountain Disaster 3D Scenes. *Geo Delft Conferences*. Delft, Netherlands, 2018.(Team Report)

English Level

- Be proficient in English listening & speaking & reading & writing and pass the CET6
- As an assistant of foreign dean and a foreign receptionist of the Faculty of Geosciences and Environmental Engineering, Southwest Jiaotong University

Self-evaluation

- Ambitious, dedicated researcher with a strong sense of responsibility and team-spirit
- Strong interests in 3D visualization & spatial cognition and scientific research

List of Academic Achievements

- **International Journal Papers**

[1] **Li W, L.**, Zhu J. An augmented representation method of debris flow scenes to improve public cognition[J]. Int. J. Geogr. Inf. Sci, 2020, DOI: 10.1080/13658816.2020.1833016.

[2] **Li W, L.**, Zhu J, Zhang Y, H., et al. An On-demand Construction Method of Disaster Scenes for Multilevel Users[J]. *Nat. Hazards*, 2020, 101(2): 409-428.

[3] **Li W.L.**, Zhu J., Zhang Y.H., et al. A Fusion Visualization Method for Disaster Information Based on Self-Explanatory Symbols and Photorealistic Scene Cooperation[J]. *ISPRS Int. J. Geo. Inf*, 2019, 8(3): 104.

[4] Guo Y.K., Zhu J., **Li W.L*.**, et al. A Fusion Visualization Method for Disaster Information Based on Self-Explanatory Symbols and Photorealistic Scene Cooperation[J]. *ISPRS Int. J. Geo. Inf*, 2019, 8(3): 104.

[5] Hu Y., Zhu J., **Li W.L.**, et al. A Virtual Reality Simulation Method for Crowd Evacuation in a Multiexit Indoor Fire Environment. ISPRS Int. J. Geo-Inf. 2020, 9, 750.

[6] Fu L., Zhu J., **Li W.L.**, et al. Tunnel Vision Optimization Method for VR Flood Scenes Based on Gaussian Blur. *Int. J. Digit. Earth*, 2020: 1-19.

[7] Zhang Y.H., Zhu J., **Li W.L.**, et al. Adaptive Construction of the Virtual Debris Flow Disaster Environments Driven by Multilevel Visualization Task[J]. *ISPRS Int. J. Geo. Inf*, 2019, 8(5): 209.

[8] Zhang Y.H., Zhu J., Zhu Q., Xie Y.K., **Li W.L.** The construction of personalized virtual landslide disaster environments based on knowledge graphs and deep neural networks[J]. *Int. J. Digit. Earth*, 2020, 13(12), 1637-1655.

[9] Xie Y.K., Zhu J., Cao Y.G., Feng D.J., **Li W.L.** Refined Extraction Of Building Outlines From High-Resolution Remote Sensing Imagery Based on a Multifeature Convolutional Neural Network and Morphological Filtering[J]. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13: 1842-1855.

- **International Conference Papers**

[1] **Li W.L.**, Zhu, J., Zhang, Y.H., et al. Disaster Scene Fusion Modeling and Visualization Method for Emergency In the Network Environment//Geoinformatics, *2018 26th International Conference on. IEEE*, 2018: 1-5.

[2] Zhang Y.H., Zhu J., **Li W.L.**, et al. Adaptive Web 3D Visualization for Diverse Terminals//Geoinformatics, *2018 26th International Conference on. IEEE*, 2018: 1-5.

- **Chinese Journals Papers**

[1] **Li W.L.**, Zhu J., Zhu X.L., et al. A Exploratory Analysis Method of VR Scene in Landslide Based on UAV Remote Sensing Data[J]. *Geomatics and Information Science of Wuhan University*, 2019(07): 1065-1072.

[2] **Li W.L.**, Zhu J., Zhang Y.H., et al. A Fusion Modeling and Interaction Method with Spatial Semantic Constraint for Debris Flow VR Scene[J]. *Geomatics and Information Science of Wuhan University* (Accepted).

[3] **Li W.L.**, Zhu, J., Hu Y., et al. Visualization Method of Characteristics of Debris Flow for Multiuser Under Emergency State[J]. *Journal of Catastrophology*, 2018, 33(2): 231-234.

[4] **Li W.L.**, Zhu, J., Huang P.C., et al. Comparative Analysis On the Cognition Impacts of Debris Flow Disaster Information for Different Visualization Methods[J]. *Journal of Catastrophology*, 2020,35(02):230-234.

[5] Hu Y., Zhu J., **Li W.L.**, et al. A Construction Optimization and Interaction Method for Flood Disaster Scenes Based on MobileVR[J]. *Acta Geodaetica et Cartographica Sinica*, 2018, 47(08): 1123-1132.

[6] Fu L., Zhu J., **Li W.L.**, et al. Knowledge-guided dynamic representation method of landslide disaster scene[J]. *Geomatics and Information Science of Wuhan University.* (Accepted).

[7] Guo Y.K., Zhu J., **Li W.L.**, et al. A Visual Representation Method of Landslide Disasters for Public Education[J]. *Geomatics and Information Science of Wuhan University.* (Accepted).

[8] Zhang Y.H., Zhu J., **Li W.L.**, et al. Adaptive Web 3D Visualization for Diverse Terminals[J]. *Journal of Southwest Jiaotong University*, 2019, 54(5): 989-996.

[9] Zhu J., She P., **Li W.L.**, et al. Dynamic Planning Method of Indoor Fire Escape Path Based on Navigation Grid [J/OL]. *Journal of Southwest Jiaotong University*. (Online published)

[10] Kang L., Zhu J., **Li W.L.**, et al. Refuge Selection of Barrier Lakes in Mountainous Area Based on Dam Break Flood Model[J]. *Journal of natural disasters*, 2018, 27(05): 39-45.

[11] Tang J., Zhu J., **Li W.L.**, et al. Photorealistic Visualization of Indoor Fire Disaster Based on Virtual Geographic Environment[J]. *Geomatics World*, 2019,26(3):72-76.

[12] Huang P.C, Zhu J., **Li W.L.**, et al. Landslide Dynamic Visualization Method Driven by UAV Remote Sensing Data[J]. *Journal of Catastrophology*, 2020,35(01):230-234.

- **Invention Patents**

[1] Zhu J., Cao Y.G., Hu Y., **Li W.L.**, Tang J. A Dynamic Path Planning Method of UAV Under Complex Environment Constraints. Application No.: (CN) 201910441841.9.

[2] Zhu J., Zhu Q., **Li W.L.**, Zhang T.Y. An interactive method of personalized railway VR scene. Application No.: (CN)202010156431.2.

[3] Zhu J., Zhu Q., **Li W.L.**, Fu L. VR scene optimization method based on tunnel vision. Application No.: (CN) 202010883183.1.