CURRICULUM VITAE

Date of last update: Sep. 26, 2019

PERSONAL INFORMATION:

Name:
Liang-Jun Zhu (朱良君)

Position:
Assistant Professor

Business Address:

State Key Laboratory of Resources and Environmental Information System,
Institute of Geographic Sciences and Natural Resources Research, Chinese Academy Sciences
11A Datun Road, Chaoyang District, Beijing 100101, P.R. China
+86(10)-64889461

E-mail:
zlj@lreis.ac.cn

Languages:
Chinese, English

Websites:
Homepage https://zhulj.net
Github https://github.com/crazyzlj

RESEARCH INTERESTS:

Watershed process modeling, spatial optimization of best management practices (BMPs), intelligent geocomputation

EDUCATION:

2014–2019	**Ph.D.** (GIS), University of Chinese Academy Sciences, Beijing, P.R.C. **Dissertation:** Method of optimizing spatial configuration of beneficial watershed management practices in a unit-boundary adaptive manner **Supervisors:** Professor A-Xing Zhu and Professor Cheng-Zhi Qin
2011–2014	**M.Sc.** (Physical Geography), Beijing Normal University, Beijing, P.R.C. **Thesis:** A laser scanner for surface roughness and rill morphology measurement based on linear structured light **Supervisor:** Professor Guang-Hui Zhang
2007–2011	**B.Sc.** (GIS), Northwest A&F University, Yangling, Shannxi, P.R.C.

PROFESSIONAL EMPLOYMENT:

07/2019 to date: Assistant Professor, State Key Laboratory of Resources and Environmental Information System (LREIS), Institute of Geographic Sciences and Natural Resources Research (IGSNRR), Chinese Academy Sciences (CAS)

AWARDS, HONORS, AND SCHOLARSHIPS:

2012–2013	National scholarship for graduate students, Beijing Normal University
2007–2008	National scholarship for undergraduate students, Northwest A&F University

PUBLICATIONS AND RESEARCH PAPERS:

Journal Articles of first author or corresponding author:

[1] **Liang-Jun Zhu**, Junzhi Liu*, Cheng-Zhi Qin*, A-Xing Zhu. **2019**. A modular and parallelized watershed modeling framework. *Environmental Modelling & Software*, 104526. doi:10.1016/j.envsoft.2019.104526

[2] **Liang-Jun Zhu**, Cheng-Zhi Qin*, A-Xing Zhu, Junzhi Liu, Hui Wu. **2019**. Effects of different spatial configuration units for the spatial optimization of watershed best management practice scenarios. *Water*, 11(2), 262. doi:10.3390/w11020262

[3] Cheng-Zhi Qin, Hui-Ran Gao, **Liang-Jun Zhu***, A-Xing Zhu, Jun-Zhi Liu, and Hui Wu. **2018**. Spatial optimization of watershed best management practices based on slope position units. *Journal of Soil and Water Conservation*, 73(5):504–517. doi:10.2489/jswc.73.5.504

[4] **Liang-Jun Zhu**, A-Xing Zhu, Cheng-Zhi Qin*, and Jun-Zhi Liu. **2018**. Automatic approach for deriving fuzzy slope positions. *Geomorphology*, 304:173–183. doi:10.1016/j.geomorph.2017.12.024

[5] A-Xing Zhu, **Liang-Jun Zhu***, Yaxing Shi, Cheng-Zhi Qin, Junzhi Liu. **2019**. Integrated watershed modeling and scenario analysis: a new paradigm for integrated study of physical geography? *Progress in Geography* (*in Chinese with English abstract*), 38(8):1111–1122. [朱阿兴, **朱良君***, 史亚星, 秦承志, 刘军志. **2019**. 流域系统综合模拟与情景分析——自然地理综合研究的新范式? 地理科学进展, 38(8):1111–1122.] doi:10.18306/dlkxjz.2019.08.001

[6] Lin Wang, **Liang-Jun Zhu***, A-Xing Zhu, Jun-Zhi Liu, and Lin Shen. **2016**. Effect of spatial unit delineation on simulating non-point source pollution by SWAT model. *Journal of Shenyang Agricultural University* (*in Chinese with English abstract*), 47(4):460–466. [王琳, **朱良君***, 朱阿兴, 刘军志, 沈琳. **2016**. SWAT 模型非点源污染模拟对空间单元划分的响应. 沈阳农业大学学报, 47(4):460–466.] doi:10.3969/j.issn.1000-1700.2016.04.012

[7] **Liang-Jun Zhu**, Guang-Hui Zhang*, Zhen-Wei Li, and Ren Geng. **2015**. A laser scanner system for rill morphology measurement based on linear structured light. *Mountain Research* (*in Chinese with English abstract*), 33(6):770–776. [**朱良君**, 张光辉*, 李振炜, 耿韧. **2015**. 一种基于线结构光技术的细沟形态测量系统. 山地学报, 33(6):770–776.] doi:10.16089/j.cnki.1008-2786.000093

[8] **Liang-Jun Zhu** and Guang-Hui Zhang*. **2013**. Review of measurement and quantification of surface microtopography. *Science of Soil and Water Conservation* (*in Chinese with English abstract*), 11(5):114–122. [**朱良君**, 张光辉*. **2013**. 地表微地形测量及定量化方法研究综述. 中国水土保持科学, 11(5):114–122.] doi:10.16843/j.sswc.2013.05.018

[9] **Liang-Jun Zhu**, Guang-Hui Zhang*, Guo-Fang Hu, and Bing Wang. **2013**. Study on evaluating ultrasonic measurement system of overland flow depth. *Journal of Soil and Water Conservation* (*in Chinese with English abstract*), 27(1):235–239. [**朱良君**, 张光辉*, 胡国芳, 王兵. **2013**. 坡面流超声波水深测量系统研究. 水土保持学报, 27(1):235–239.] doi:10.13870/j.cnki.stbcxb.2013.01.044

[10] **Liang-Jun Zhu**, Guang-Hui Zhang*, and Zong-Ping Ren. **2012**. Comparing four methods for soil infiltration measurement. *Bulletin of Soil and Water Conservation* (*in Chinese with English abstract*), 32(6):163–167. [**朱良君**, 张光辉*, 任宗萍. **2012**. 4 种土壤入渗测定方法的比较. 水土保持通报, 32(6):163–167.] doi:10.13961/j.cnki.stbctb.2012.06.050

Journal Articles of co-author:

[11] Hui-Ran Gao, Cheng-Zhi Qin*, **Liang-Jun Zhu**, A-Xing Zhu, Jun-Zhi Liu, and Hui Wu. **2018**. Using slope positions as spatial units for optimizing spatial configuration of watershed management practices. *Journal of Geo-information Science* (*in Chinese with English abstract*), 20(6):781–790. [高会然, 秦承志*, **朱良君**, 朱阿兴, 刘军志, 吴辉. **2018**. 以坡位为空间配置单元的流域管理措施情景优化方法. 地球信息科学学报, 20(6):781–790.] doi:10.12082/dqxxkx.2018.170622

[12] Lun-Jiang Wang, Guang-Hui Zhang*, **Liang-Jun Zhu**, and Hao Wang. **2017**. Biocrust wetting induced change in soil surface roughness as influenced by biocrust type, coverage and wetting patterns. *Geoderma*, 306:1–9. doi:10.1016/j.geoderma.2017.06.032

[13] Hui-Ran Gao, Lin Shen, Jun-Zhi Liu*, A-Xing Zhu, Cheng-Zhi Qin, **Liang-Jun Zhu**. **2017**. Review on the simulation of non-point source pollution in the Hilly region of Southern China. *Journal of Geo-information Science* (*in Chinese with English abstract*), 19(8):1080–1088. [高会然, 沈琳, 刘军志*, 朱阿兴, 秦承志, **朱良君**. **2017**. 中国南方丘陵区非点源污染过程模拟研究进展. 地球信息科学学报, 19(8):1080–1088.] doi:10.3724/SP.J.1047.2017.01080

[14] Jing-Chao Jiang, Jie Yu, Cheng-Zhi Qin, Jun-Zhi Liu*, Run-Kui Li, **Liang-Jun Zhu**, and A-Xing Zhu. **2017**. A knowledge-driven method for intelligent setting of parameters in hydrological modeling. *Geomatics and Information Sciences of Wuhan University* (*in Chinese with English abstract*), 42(4):525–530. [江净超, 余洁, 秦承志, 刘军志*, 李润奎, **朱良君**, 朱阿兴. **2017**. 知识驱动下的水文模型参数智能化设置方法. 武汉大学学报·信息科学版, 42(4):525–530.] doi:10.13203/j.whugis20150044

[15] Zong-Ping Ren*, **Liang-Jun Zhu**, Bing Wang, and Sheng-Dong Cheng. **2016**. Soil hydraulic conductivity as affected by vegetation restoration age on the Loess Plateau. *Journal of Arid Land*, 8(4):546–555. doi:10.1007/s40333-016-0010-2

[16] Jun-Zhi Liu, A-Xing Zhu*, Cheng-Zhi Qin, Jing-Chao Jiang, **Liang-Jun Zhu**, and Lin Shen. **2015**. Parallel computing of watershed process simulation guided by geographical laws. *Journal of Geo-information Science* (*in Chinese with English abstract*), 17(5):506–514. [刘军志, 朱阿兴*, 秦承志, 江净超, **朱良君**, 沈琳. **2015**. 论地理规律对流域过程模拟并行计算的指导作用. 地球信息科学, 17(5):506–514.] doi:10.3724/SP.J.1047.2015.00506

[17] Guo-Fang Hu, Guang-Hui Zhang*, and **Liang-Jun Zhu**. **2015**. Comparison of three methods to measure depth of overland flow. *Bulletin of Soil and Water Conservation* (*in Chinese with English abstract*), 35(3):152–156. [胡国芳, 张光辉*, **朱良君**. **2015**. 3 种坡面流水深测量方法比较. 水土保持通报, 35(3):152–156.] doi:10.13961/j.cnki.stbctb.2015.03.034

[18] Ren Geng, Guang-Hui Zhang*, Zhen-Wei Li, Guo-Fang Hu, Hao Wang, and **Liang-Jun Zhu**. **2014**. Variation of physical properties and soil organic matter based on the method of stratified sampling. *Journal of Soil and Water Conservation* (*in Chinese with English abstract*), 28(6):194–199+205. [耿韧, 张光辉*, 李振炜, 胡国芳, 王浩, **朱良君**. **2014**. 基于分层抽样法的小流域土壤物理性质和有机质差异特征. 水土保持学报, 28(6):194–199+205.] doi:10.13870/j.cnki.stbcxb.2014.06.036

[19] Bing Wang, Guang-Hui Zhang*, Yang-Yang Shi, Xun-Chang Zhang, Zong-Pin Ren, and **Liang-Jun Zhu**. **2013**. Effect of natural restoration time of abandoned farmland on soil detachment by overland flow in the Loess Plateau of China. *Earth Surface Processes and Landforms*, 38(14):1725–1734. doi:10.1002/esp.3459

Book or Chapter:

[1] Cheng-Zhi Qin, **Liang-Jun Zhu**, Junzhi Liu, A-Xing Zhu. **Under review**. HPC application in spatially distributed hydrological modeling. *In*: Wenwu Tang and Shaowen Wang eds., High Performance Computing for Geospatial Applications. Springer.

RESEARCH ACTIVITIES

Participating in research projects:

[1] "Slope position as spatial unit for optimizing scenarios of Beneficial Watershed Management Practices (BMPs) in a unit-boundary adaptive manner", National Natural Science Foundation of China (No. 41871362), 2019–2022, PI: Cheng-Zhi Qin

[2] "Scenario analysis of organic waste management in Dianbuhe watershed", National Key Technology Innovation Project for Water Pollution Control and Remediation (No. 2013ZX07103006-005), 2013–2016, PI: A-Xing Zhu

[3] "Development of parallel algorithm for spatial statistics and geographical process simulation", National High-Tech Research and Development Program of China (No. 2011AA120305), 2011–2013, PI: A-Xing Zhu

[4] "Hundred Talents Program" of the Chinese Academy of Sciences, 2012–2014, PI: Guang-Hui Zhang

[5] "Research on experimental techniques of soil erosion", Independent research project of State Key Laboratory of Earth Surface Processes and Resource Ecology (No. 2012-ZY-02), 2012–2013, PI: Guang-Hui Zhang

Conference Oral Presentations:

[1] Development of a modular and parallelized watershed modeling framework. *1st Regional Conference on Environmental Modeling and Software (Asian Region)*, May. 18–20, **2019**. Nanjing, China.

[2] An automatic approach of prototype-based fuzzy slope positions. *AAG Annual Meeting*, Apr. 5–9, **2017**. Boston, USA.

[3] Automatic approach for deriving fuzzy slope positions. *33rd International Geographical Congress (IGC)*, Aug. 21–25, **2016**. Beijing, China.