

ZHI LI

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120 David L Boren Blvd, Norman, OK 73072

EDUCATION

University of Oklahoma (OU)

Aug. 2019 — Ongoing

Ph.D. candidate in Civil & Environmental Science

Hydrometeorology and Remote Sensing Laboratory

Specification in remote sensing precipitation retrieval and hydrologic evaluations.

National University of Singapore (NUS)

Aug. 2017 — Jan. 2019

M.Sc in Civil & Environmental Engineering

Major in Hydraulic Engineering & Water Resources Management

Overall GPA: 4.68/5.0

Technical University of Delft (TUD)

Feb. 2018 — Jul. 2018

Exchange in Civil Engineering & Geosciences

Major in Water Resources Management

Overall GPA: 8.43/10.0

Hohai University

Sep. 2013 — Jul. 2017

B.Eng in Water Conservance & Hydropower Engineering

Overall GPA: 4.48/5.0

Average Score: 86.1

WORKING EXPERIENCE

Teaching Assistant, *CEES5020-992 Fundamental Hydrology*

May. 2020 — Aug. 2020

Teaching Assistant, *CEES5020-997 Quantitative Hydrometeorology*

Jan. 2020 — May 2020

Teaching Assistant, *CEES2113 Statics*

Aug. 2019 — Jan. 2020

Data Scientist, *Hydroinformatics Institute*

Jan. 2019 — July. 2019

PROJECTS

• twenty-year IMERG data evaluation: similarities, differences

Aug. 2019 — Ongoing

• Cross-examination of Uncertainties in Extreme Precipitation Events using
Multiplicative Triple Collocation

Aug. 2019 — Ongoing

• Radar Rainfall Monitoring and Nowcasting System For Urban Flood Management in
Singapore, Data Scientist, *Hydroinformatics Institute*

Jan. 2019 — Ongoing

• Radar Rainfall Monitoring and Nowcasting System For Urban Flood Management in
Singapore, Data Scientist, *Hydroinformatics Institute*

Jan. 2019 — Ongoing

• CCTV Rainfall Camera, Data Scientist, *Hydroinformatics Institute*

Feb. 2019 — Ongoing

• Outdoor Thermal Comfort in Urban Spaces in Singapore, Research Asistant,
National University of Singapore

Aug. 2018 — Nov. 2018

• Genetic Programming in Hydrology, Master Thesis, *National University of Singapore*

Aug. 2018 — Nov. 2018

• Arch Dam Design, Bachelor Thesis, *Hohai University*

Feb. 2017 — Jul. 2017

PUBLICATIONS

- **Li, Z.**, Tang, G., Hong, Z., Chen, M., Gao, S., Kirstetter, P., Gourley, J.J., Wen, Y., Yami, T., Nabih, S., Hong, Y. (2021). Two-decades of GPM IMERG Early and Final Run products intercomparison: Similarity and Differences in Climatology, Rates, and Extremes, Journal of Hydrology, doi: 10.1016/j.jhydrol.2021.125975.
- **Li, Z.**, Wen, Y., Schreier, M., Behrangi, A., Hong, Y., Lambrigtsen, B. (2020). Advancing satellite precipitation retrievals with data driven approaches: is black box model explainable? Earth and Space Science, 7, e2020RA001423. <https://doi.org/10.1029/2020EA001423>.
- **Li, Z.**; Chen, M.; Gao, S.; Hong, Z.; Tang, G.; Wen, Y.; Gourley, J.J.; Hong, Y. Cross-Examination of Similarity, Difference and Deficiency of Gauge, Radar and Satellite Precipitation Measuring Uncertainties for Extreme Events Using Conventional Metrics and Multiplicative Triple Collocation. Remote Sens. 2020, 12, 1258.
- Sui, X., **Li, Z.**, Ma, Z., Xu, J., Zhu, S., Liu, H., Ground Validation and Error Sources Identification for GPM IMERG Product over the Southeast Coastal Regions of China. Remote Sensing. 2020,12,4154.
- Bibliometric Analysis of Research on Fish Metal from 1997 to 2016, Co-author, Natural Hazards.
- Investigation and Thoughts on Accurate Solutions to Drinking Water Safety Issues of Poor Rural Areas of Qianjiang District, First Author, Energy Economy (ISSN 1672-0351)
- An Analysis of the Vibration Performance of Underground Powerhouse of a Certain Pumped Storage Power Station, First Author, Energy Economy (ISSN 1672-0351)

SOFTWARES

- The Coupled Routing and Excess STorage model - inundation MApping and Prediction (CREST-iMAP)

TECHNICAL STRENGTHS

Programming Languages	Python (Proficient), QGIS (Proficient), Matlab, R, Fortran
Skills	Machine Learning, Geospatial Data Processing, Remote Sensing, Computer Vision, Web Development, L ^A T _E X
Hydrologic models	SUPERFLEX, HBV, FLEX-TOPO, CREST, CREST-iMAP
Artificial Intelligence	ANN, RNN, CNN, SVM, RF, etc.

CERTIFICATIONS

- Graduate College Hoving Fellowship
- Teaching Assistant at university of Oklahoma
- Research Assistant at university of Oklahoma
- Academic Scholarship at Hohai University
- Social Work Scholarship at Hohai University
- Spiritual and Cultural Scholarship at Hohai University
- Excellent Student Leader Award at Hohai University
- The Third Prize in the Video Production Competition at Hohai University
- The Third Prize and The Best Appealing Award at the Dam Design Competition

- Excellent Volunteer Award of the 2014 Nanjing Youth Olympic games

LANGUAGE

Chinese	Excellent
English	Good