

YI XU

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EDUCATION

2009-2013 Ph.D., Civil and Environmental Engineering, University of Pittsburgh, USA
2002-2006 B.Eng., Hydrology and Water Resources, Hohai University, China

PROFESSIONAL EXPERIENCE

2023.2-present Postdoctoral Scholar, University of California at Santa Cruz, USA
2022.6-2022.11 Senior Engineer, Fujian Big Data Primary Development Co., Ltd, China
2022.4-2022.5 Senior Engineer, Fujian E-government Construction and Operation Co., Ltd, China
2020.2-2022.3 Senior Engineer, Fujian Provincial Investigation, Design & Research Institute of Water Conservancy & Hydropower, China
2017.12-2019.2 Senior Product Manager, Tencent Holdings Limited, China
2015.10-2017.11 Research Fellow, Nanjing Normal University, China
2016.2-2017.9 Visiting Postdoc/Research Scholar, Pacific Northwest National Laboratory, USA
2013.11-2015.7 Environmental Engineer, Tetra Tech Inc, USA
2013.1-2013.4 Teaching assistant, University of Pittsburgh, USA
2009.1-2012.12 & 2013.5-2013.10 Research assistant, University of Pittsburgh, USA
2006.9-2008.9 Research assistant, Hohai University, China

SELECTED AWARDS

2002-2006 Academic Scholarship at Hohai University
2003-2004 Mechanics Scholarship of “Xu, Zhilun” at Hohai University

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

American Geophysical Union
International Association for Hydro-Environment Engineering and Research

PUBLICATIONS

Chen, Y., Z Nan, S Zhao, **Y Xu** (2020), A Bayesian Approach for Interpolating Clearsky MODIS Land Surface Temperatures on areas with Extensive Missing Data, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, DOI 10.1109/JSTARS.2020.3038188

Huang, M., **Y, Xu.**, M. Longo, M. Keller, R. Knox, C. Koven and R. Fisher. (2020) Assessing impacts of selective logging on water, energy, and carbon budgets and ecosystem dynamics in Amazon forests using the Functionally Assembled Terrestrial Ecosystem Simulator, Biogeosciences. DOI: 10.5194/bg-17-4999-2020

Xu, Y., F. Plaza, X. Liang, T. W. Davis, J. Nichols, J.K. Fu and P. Koranchie-Boah (2020), A hydro-thermal-geochemical modeling framework to simulate reactive transport in a waste coal area under amended and non-amended conditions, Heliyon. DOI: 10.1016/j.heliyon.2019.e02803

Zhao, Y, Z. Nan, X. Li, **Y. Xu**, L. Zhang. (2019) On applicability of a fully distribute hydrological model in the cold and alpine watershed of Northwest China, Journal of Glaciology and Geocryology. DOI: 10.7522/j.issn. 1000-0240.2019.0003

Zhang, L., Z. Nan, X. Liang, **Y. Xu**, F. Hernandez, L. Li. (2018) Application of the MacCormack scheme to overland flow routing for high-spatial resolution distributed hydrological model, *Journal of Hydrology*. DOI: 10.1016/j.jhydrol.2018.01.048

Zhang, L., Z. Nan, W. Yu, Y. Zhao, **Y. Xu**. (2018) Comparison of baseline period choices for separating climate and land use/land cover change impacts on watershed hydrology using distributed hydrological models, *Science of the Total Environment*. DOI: 10.1016/j.scitotenv.2017.12.055

Tian Zhou, Maoyi Huang, Jie Bao, Zhangshuan Hou, Evan Arntzen, Robert Mackley, Alex Crump, Amy E. Goldman, Xuehang Song, **Yi Xu**, John Zachara (2017). A New Approach to Quantify Shallow Water Hydrologic Exchanges in a Large Regulated River Reach, *Water*. DOI: 10.3390/w9090703

Plaza, F., Y. Wen, H. Perone, **Y. Xu** and X. Liang, (2017), Acid Rock Drainage Passive Remediation: Potential Use of Alkaline Clay, Optimal Mixing Ratio and Long-term Impacts, *Science of the Total Environment*. DOI: 10.1016/j.scitotenv.2016.10.076

Zhang, L., Z. Nan, **Y. Xu** and S. Li (2016), Hydrological Impacts of Land Use Change and Climate Variability in the Headwater Region of the Heihe River Basin, Northwest China, *PloS One*. 2016, 11(6): e158394. DOI: 10.1371/journal.pone.0158394.

Xu, Y (2014), Investigation of Environmental Impacts of Beneficial Reuse of Bauxite Residue in Coal-Refuse Area Based on a Hydro-Thermal-Geochemical Model. Doctoral Dissertation, University of Pittsburgh.

Hao, Z., L. Li, **Y. Xu**, Q. Ju, J. Yan, J. Luo, J. Wang, J. Hao. (2009) Study on Delta-DCSI downscaling method of GCM output. *Journal of Sichuan University (Engineering Science Edition)*, 41(5):1~7 2009

Yang, T., J. Chen, Y. Zhou, W. Yao, X. Chen, X. Shi, **Y. Xu**, G. Huang. (2008) Scenario simulation of runoff and sediment processes in the small catchment in the hilly-gully region of Loess Plateau. *Science of Soil and Water Conservation*. 6(2):8-14, 2008

SELECTED PRESENTATIONS AND CONFERENCE

Huang, M, **Y. Xu**, M. Longo, M. Keller, R. Knox, C. Koven and R. Fisher (2017), Assessing impacts of selective logging on water, energy, and carbon fluxes in Amazon forests using the Functionally Assembled Terrestrial Ecosystem Simulator (FATES). New Orleans, American Geophysical Union Fall meeting.

Xu, Y., M. Huang, M. Keller, M. Longo, R. Knox, C. Koven and R. Fisher (2016), Assessing impacts of selective logging on water, energy, and carbon fluxes in Amazon forests using the Functionally Assembled Terrestrial Ecosystem Simulator (FATES). San Francisco, American Geophysical Union Fall meeting.

Zhang, L., Z. Nan, **Y. Xu** and S. Li (2016), Hydrological Impacts of Land Use Change and Climate Variability in the Headwater Region of the Heihe River Basin, Northwest China. San Francisco, American Geophysical Union Fall meeting.

Anderson, C., B. P Bond-Lamberty, M. Huang, **Y. Xu** and J. Stegen (2016), Controls on and consequences of specific leaf area variation with permafrost depth in a boreal forest. San Francisco, American Geophysical Union Fall meeting.

Xu, Y., X. Liang, T.W. Davis, J. Patterson, J. K. Fu, and P. Koranchie-Boah (2011), An assessment of the long-term environmental impacts of reusing alkaline clay on coal refuse piles with a dynamic solute transport model at a watershed scale, San Francisco, American Geophysical Union Fall meeting.

Liang, X., X. Luo, **Y. Xu**, M. Huang, and L.R. Leung, Representing the effects of subgrid spatial variability, hydraulic redistribution, and groundwater table dynamics on hydrology in CLM, DOE Integrated Climate Change Modeling Science Team Meeting, Gaithersburg, MD, March 29 – April 2, 2010.