Biographical Sketch

Tiantian Yang
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(A) PROFESSIONAL PREPARATION

Tsinghua University	Beijing, China	Mechanical Engineering	B.S. 2009
University of California, Irvine	Irvine, CA	Mechanical Engineering	M.S. 2010
University of California, Irvine	Irvine, CA	Civil and Environmental Engineering	Ph.D. 2015

(B) APPOINTMENTS

2018 to present	Assistant Professor	University of Oklahoma, Norman
2016-2018	Research Scientist III	Deltares USA Inc.
2015-2016	Postdoctoral Scholar	University of California, Irvine
2010-2015	Graduate Student Researcher	University of California, Irvine
2005-2009	Undergrad Student Researcher	Tsinghua University

(C) PRODUCTS
(i) Most Closely Related to the Proposed Project

1. **Yang T.,** Hsu K., Duan Q., Sorooshian S., Wang C. 2018. Method to Estimate Optimal Parameters. In: Duan Q., Pappenberger F., Thielen J., Wood A., Cloke H., Schaake J. (eds) Handbook of Hydrometeorological Ensemble Forecasting. Springer, Berlin, Heidelberg, DOI: https://doi.org/10.1007/978-3-642-40457-3_26-1, Online ISBN: 978-3-642-40457-3
2. Rahnamay. M, **Yang,T.**, Sadege,M., AghaKouchak, A., Hsu, K., Sorooshian, S. 2018. A Shuffled Complex-Self Adaptive Hybrid EvoLution Optimization Framework. *Environmental Modeling and Software*. 104:215-235.
3. *(ESI Highly Cited Paper)* **Yang, T.**, Asanjan, A.A., Welles, E., Gao, X., Sorooshian, S. and Liu, X. 2017. Developing Reservoir Monthly Inflow Forecasts Using Artificial Intelligence and Climate Phenomenon Information. *Water Resources Research*. 53(4):2786-2812.
4. Asanjan A.A., **Yang, T.**, K Hsu, S Sorooshian, J Lin, Q Peng. 2018. Short-Term Precipitation Forecast Based on the PERSIANN System and LSTM Recurrent Neural Networks. *Journal of Geophysical Research: Atmospheres*. 123 (22):12,543-12,563.
5. *(ESI Highly Cited Paper)* **Yang, T.,** Asanjan, A.A., Faridzad, M., Hayatbini, N., Gao, X. and Sorooshian, S. 2017. An Enhanced Artificial Neural Network with A Shuffled Complex Evolutionary Global Optimization with Principal Component Analysis. Information Sciences. https://doi.org/10.1016/j.ins.2017.08.003

(ii) Other Significant Products.
1. **Yang, T.,** Gao, X., Sellars, S.L. and Sorooshian, S. 2015. Improving the Multi-objective Evolutionary Optimization Algorithm for Hydropower Reservoir Operations in the California Oroville–Thermalito Complex. *Environmental Modelling & Software*. 69:262-279.
2. **Yang, T.**, Tao, Y., Li, J., Zhu, Q., Su, L., He, X. and Zhang, X. 2017. Multi-criterion Model Ensemble of CMIP5 Surface Air Temperature over China. *Theoretical and Applied Climatology*. 1-16.

3. Tao, Y., **Yang, T.***, Faridzad, M., Jiang, L., He, X. and Zhang, X. 2017. Non-stationary Bias Correction of Monthly CMIP5 Temperature Projections over China using a Residual-based Bagging Tree Model. *Int. J. Climatol*. doi:10.1002/joc.5188
4. *(ESI Highly Cited Paper)* Liu, X., **Yang, T.**, Hsu, K., Liu, C. and Sorooshian, S. 2017. Evaluating the Streamflow Simulation Capability of PERSIANN-CDR Daily Rainfall Products in Two River Basins on the Tibetan Plateau. *Hydrol. Earth Syst. Sci*. 21(1):169-181.
5. **Yang, T.**, Gao, X., Sorooshian, S. and Li, X. 2016. Simulating California Reservoir Operation Using the Classification and Regression-tree Algorithm Combined with a Shuffled Cross-validation Scheme. *Water Resources Research*. 52(3):1626-1651.

(D) SYNERGISTIC ACTIVITIES

- Tiantian Yang has worked with state, federal, and local policy-makers, diverse researchers, and stakeholders on the implications of science and research for improving weather forecasts for National Weather Service's 13 river forecast center, and developing optimization algorithms, hydrologic models, environmental, water, and infrastructure policies, ranging from issues of climate change, system planning and management, environmental management, water supply, weather prediction, flooding, and sustainable development. (2015-present)
- Associate Director, University of Oklahoma, Hydrology and Water Security (HWS) online education and research program. Member, CERC-WET Internal Review Advisory Board. Member, CERC-WET Central Management Support Office (CMSO). Technical Committee Member, CYWater. (2018-present)
- Session Primary Convener, Organizer, Liaison, and technical committee for American Geophysical Union, (2017-present)
- University of Oklahoma Presidential Dream Course Instructor Spring 2020. (2019-2020)
- Reviewers of different journals for total 80+ times, Judge, Liaisons, Panelist for 10+ times, Presentations in conference and seminars: 40+ times (2015- present)