

Alfred Kalyanapu, Ph.D.



Associate Professor

Highest Degree University: University of Utah

akalyanapu@tntech.edu

PO Box: 5015

(931) 372-3561

I am interested in understanding the complex interactions of water with urban areas including energy, climate, infrastructure and sustainability.

Research Topics:

- Climate Impacts
- Computational Hydraulics & Hydrology
- Hydraulic/Hydrologic Modeling
- Urban Water Management
- Regional Scale Flood Modeling & Simulation
- GIS Applications in Water Resources Engineering

More Information

Educational Background:

Ph.D., Civil and Environmental Engineering, University of Utah, USA, 2011

M.S., Civil and Environmental Engineering, University of Utah, USA, 2007

B.Tech., Civil Engineering, National Institute of Technology, Warangal, India, 2003

Selected Publications:

- Dullo, T. T., **Kalyanapu**, A. J., and Teegavarapu, R. S. V. "Evaluation of Changing Characteristics of Temporal Rainfall Distribution within 24-hour Duration Storms and their influences on Peak Discharges: A Case Study of Asheville, North Carolina" Journal of Hydrologic Engineering (In Print).
- Bhuyian, Md. N. M., and **Kalyanapu**, A. J. (2017). "Accounting Digital Elevation Uncertainties for Flood Consequence Assessment" Journal of Flood Risk Management, DOI: 10.1111/jfr3.12293

- Ahmadisharaf, E., and **Kalyanapu**, A. J., Thames, B. A., and Lillywhite, J. (2016). "Application of a probabilistic framework for comparison of dam breach prediction methods", Environmental Modelling & Software Journal, doi: 10.1016/j.envsoft.2016.09.022.
- Ahmadisharaf, E., **Kalyanapu**, A. J., and Chung, E.-S. (2016) "Spatial probabilistic multi-criteria decision making for assessment of flood management alternatives", Journal of Hydrology, Vol. 533, 365-378, doi: 10.1016/j.jhydrol.2015.12.031.
- Ahmadisharaf, E., **Kalyanapu**, A. J., and Chung, E.-S. (2015). "Evaluating the effects of flood duration and velocity on selection of flood management alternatives using spatial multi-criteria decision making", Water Resources Management, 29(8), pp 2543-2561.
- Bhuyian, Md. N. M., **Kalyanapu**, A. J., and Nardi, F. "An Approach for Digital Elevation Models (DEM) Correction by Improving Channel Conveyance" Journal of Hydrologic Engineering, doi: 10.1061/(ASCE)HE.1943-5584.0001020.