*Shashi Shekhar:* (1) PI for NSF 1541876 (2015, $50,000): FEW: A Workshop to Identify Interdisciplinary Data Science Approaches and Challenges to Enhance Understanding of Interactions of Food Systems and Water Systems. Broader impacts: The workshop brought the FEWS and BD communities together to identify data and data science needs. For example, participants underscored the need for community infrastructure (shared data sets, evaluation metrics, models, tools), and the training of a new generation of scientists with the requisite training in the Data Sciences and the FEWS sciences to facilitate progress at their interface. Related publications include [1], [2].

(2) Shekhar is also the Co-PI for NSF 1029711 (2010-2015, $6M approximate.): Expedition: Understanding Climate Change: A Data Driven Approach. Intellectual merit: The project developed computationally efficient algorithms for spatiotemporal change interval footprint detection, as well as a novel spatial classification model called focal-test-based spatial decision tree for earth observation imagery data. Results have been published in [3]-[16]. Broader Impact: The proposed techniques can potentially help climate scientists study regions with abrupt changes, and help climate scientists estimate methane emissions based on wetland maps created from earth observation images towards understanding climate change. Two Ph.D. students and two HBCU undergraduate students were mentored.

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