

Workshop on Wireless Intelligent Sensor Networks



June 5, 2013

Duke University, Durham, NC



Recent advancements in wireless sensor technologies and autonomous vehicles are transforming many areas of science and engineering, spanning from ecology and geosciences to robotics and artificial intelligence. Although sensor technologies vary greatly, from embedded sensor systems on unmanned vehicles to tiny “smart dust” sensors, a unifying paradigm that has recently emerged in the literature is to treat sensor networks as a system of dynamic information-gathering agents. As a result, environmental modeling and prediction tools that utilize sensors to obtain in-situ measurements over time can also be used to help manage and control the sensors to improve the quality of the sensor measurements. The WISeNet Workshop brings together scientists and engineers in the fields of sensor networks, environmental modeling and prediction, and computational intelligence, to ultimately improve our understanding of environmental and ecological processes, in particular climate change and pollution, and to achieve a more effective use of unmanned vehicles and remote sensing.

TOPICS OF INTEREST

Information-Driven Environmental Sensing and Prediction

- *Sensor Management*
- *Ecosystem and Eco-Hydrological Dynamic Modeling and Prediction*
- *Climate-Change Prediction and Mitigation Tools*
- *Sensor Data Processing, Fusion, and Simulation*

Guidance and Control of Mobile Sensor Networks

- *Unmanned Vehicles*
- *Active Sensing*
- *Signal Processing*
- *Intelligent Control and Coordination of Mobile Networks*

Biologically-Inspired Intelligent Sensor Systems

- *Information Theory*
- *Adaptation and Learning*
- *Sensorimotor Modeling and Control*



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Important Dates:

Abstract submission deadline: **March 15, 2013**

Abstract acceptance notification: **April 8, 2013**

Registration deadline and final manuscripts due: **May 1, 2013**

For more information visit: <http://wisenet.pratt.duke.edu/workshops>