

## Presents

Dr. Ramon Lawrence Computer Science, UBC, Okanagan campus

# **Reducing Water Usage With Sensor Networks and Data Analysis**

**Time & Date**: 5:30pm-6:30pm, Tuesday June 05, 2012 **Location**: EME 1203, UBC Okanagan Campus



### Talk Abstract:

Technology allows us to monitor our environment and reduce our usage of finite resources such as energy and water. In the Okanagan Valley, water supplies are constrained and the population is continually increasing. A significant amount of water is used for outdoor irrigation, often very inefficiently. This presentation will discuss research on building automated systems to collect sensor data through wireless sensor networks and how that data is stored and analyzed to reduce lawn irrigation by up to 50%. Our research group has built a complete sensor architecture including hardware, software, and reporting and analysis. The system has been deployed in Sonora Park in Glenmore, and ongoing research collaborations are with the City of Kelowna.

#### **Speaker Biography:**

Ramon Lawrence is an associate professor of computer science at UBC Okanagan. His research interests are database systems, embedded devices, and wireless sensor networks. He is the founder of Unity Data Inc. that provides software for data integration from multiple sources and is a database consultant for enterprises requiring data solutions. The research partnership with the City of Kelowna on adaptive irrigation systems has resulted in funding from the Okanagan Basin Water Board and a best paper award at the IEEE Sensor Application Symposium in 2011. Dr. Lawrence is a member of the ACM and IEEE.

### Pizza and drink will be served after the seminar!

For further information regarding the seminar, please contact Julian Cheng (Email: julian.cheng@ubc.ca)