

Institute of Electrical and Electronic Engineers

## Wednesday, March 25, 2015

## Summit County Educational Center

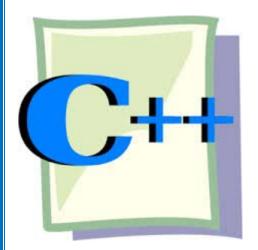
420 Washington, Ave., Cuy. Falls, OH 44221

# **Generic Programming with Concepts**

#### **Dr. Andrew Sutton**

Assistant Professor, The University of Akron

Andrew Sutton is an assistant professor at the University of Akron. His research interests lie at the confluence software engineering, programming languages, and computer systems. Dr. Sutton previously worked as a postdoctoral research assistant at Texas A&M University on the design and implementation of concepts for C++. He is a member of the C++ Standards Committee and Project Editor for the Technical Specification, C++ Extensions for Concepts. He graduated with a PhD in computer science from Kent State University in 2010.



#### 6:00 – Dinner - Eddy's Restaurant

(across from the Educational Center)
7:00— Program

### Cost: \$15 per person

(Members and 1 guest) **Students \$10** 

Menu Choice of:



Generic programming is widely practiced in the C++ community as a means of providing efficient, reusable libraries. This style of programming is characterized by the use of templates to define data structures and algorithms in terms of template parameters that can be replaced by user-supplied types and values later. Today, C++ templates are unconstrained, meaning that any type or value could potentially be substituted for a template parameter. This is clearly not the case, since, for example, taking the arithmetic mean of a sequence of strings is almost certainly meaningless. The Concepts Lite Technical Specification extend the C++ programming language with features that support the specification and checking of constraints on template arguments. This talk focuses on principles of generic programming using concepts.

Please contact Rick Buchanan at (330) 497-8250 or <u>R.Buchanan@ieee.org</u> for reservations **no later than Noon Tuesday, March 24**. Please include your meal selection.