Using Biology to Inspire Engineering Design

Dr. James A. Smith, PEng.
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Time: 12:00 – 1:00 pm, April 11, 2012
Location: KHE-216

Abstract

This talk, "Using Biology to Inspire Engineering Design", contrasts the positive and negative ways that biomimetics can be applied to creating new things. He'll explain the importance of combining knowledge in both the biological sciences and in engineering in the development of future technology. Wind turbines, aircraft and bullet trains will be among the examples highlighted.

Biography of Speaker

James Andrew Smith is an Assistant Professor in Electrical and Computer Engineering at Ryerson University. His research combines robotics with biomedical engineering and has active projects in legged locomotion, actuator technology and obstetrics.

James Andrew Smith received BSc and MSc degrees in Electrical Engineering at the University of Alberta in 1998 and 2001, respectively. In 2006 he completed a PhD in Mechanical Engineering at McGill University. His PhD focused on developing the world's first galloping robots. From 2006 to 2008 he conducted sports science research on legged systems at the University of Jena in Jena, Germany. He is the recipient or co-recipient of four IEEE Real World Engineering Projects awards from 2007 to 2010.