# Pattern Recognition for Myoelectric Signals and an Introduction to the Centre for Excellence in Signal and Image Processing at the University of Strathclyde

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The most advanced commercially available prosthetic hand in the world still only uses muscle signal amplitude corresponding to 'open' and 'close', or clever re-use of these (e.g. second open command to cause a pointing gesture). Pattern Recognition promises to allow a user to control the hand with muscle signals that directly correspond to the intended movement. In my work, a novel EMG activity detector has been developed that allows more accurate assessment of a user's intention of movement.

The Centre for Excellence in Signal and Image Processing (CeSIP) at the University of Strathclyde, Glasgow is at the cutting edge across the field of Digital Signal Processing in micro-satellites, radar, hearing aids, speech processing, video analytics, medical imaging and more. In this presentation, the activities of CeSIP will be described.

## Mar 21, 2013
### admission is free
### 14:30 – 15:30
### Southam Hall
### Room 317
### Carleton University

Paul McCool received B.Eng. (Hons.) degree in Electronic Engineering and Physics from the University of Glasgow, UK, in 1999, and M.Sc. (with distinction) in Electronic and Electrical Engineering from the University of Strathclyde, Glasgow, UK, in 2010.

He worked as a Project Officer in the Defence Equipment and Support agency of the UK Ministry of Defence between 1999 and 2009. He is currently a PhD Student at the University of Strathclyde, Glasgow, UK, researching pattern recognition and muscle activity detection for forearm myoelectric signals to control a prosthetic hand.

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