

**Department of Electrical and Computer Engineering**  
**University of Rochester, Rochester, NY**

**Ph.D. Public Defense**

**Thursday, April 17, 2014**

**12:30 PM**

**Hopeman Building 335**

**Low-Cost, High-Resolution Computational Ultrasound Imaging**

**Roland Cheng**

Supervised by  
Professor Zeljko Ignjatovic

**Abstract**

Computational ultrasound imaging is a novel low-cost and high-resolution ultrasound imaging system that utilizes one ADC per array. Unfocused transmit and receive echo

pulses are spatio-temporally sampled at 13.3 MHz (1000 samples) and 1203.29 MHz (1000 samples) respectively.