# Andrew Kenneth Ho

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## Education

Ph.D. Candidate, Electrical and Computer Engineering, University of British Columbia

M.E.Sc., Biomedical Engineering, University of Western Ontario, 2010. Thesis: "An Interactive Computer Model of the Eardrum for Surgical Simulation"

B.E.Sc. with Distinction, Electrical and Computer Engineering, University of Western Ontario, 2008.

# Employment

Assistant Video Algorithms Designer, 2006-2007 Gennum Corporation, Burlington, Ontario, Canada

# Publications

#### Journal Articles

**Ho A.K.**, Tsou, L., Green, S., and Fels, S.S. "A 3D Swallowing Simulation using Smoothed Particle Hydrodynamics," *Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization*, Published online 2014.

**Ho A.K.**, Alsaffar, H.A., Doyle P.D., Agrawal S.K., and Ladak H.M. "Virtual Reality Myringotomy Simulation with Real-Time Deformation: Development and Validity Testing," *The Laryngoscope* 2012 Aug;122(8):1844-51.

#### Peer-reviewed Posters

**Ho A.K.**, Nicosia, M.A., Dietsch, A., Pearson, W., Rieger, J., Solomon, N., Stone, M., Inamoto, Y., Saitoh, E., Green, S., and Fels, S.S. "3D Dynamic Visualization of swallowing from Multi-Slice Computed Tomography," August 2014, SIGGRAPH, Vancouver, BC. 2<sup>nd</sup> place winner in the student research competition.

### Proceedings

**Ho, A.K.,** Alsaffar, H.A., Doyle, P.D., Agrawal, S.K., and Ladak, H.M. "Interactive Computer Model of the Eardrum for Training in Myringotomy," February 2011, 34<sup>th</sup> ARO MidWinter Meeting, Baltimore, MD.

Ho, A.K., and Ladak, H.M. "Mass-spring Modeling of the Eardrum for Surgical Simulation," June 2010, *CMBEC* 33, Vancouver, BC.

#### Invited Talks

Ho A.K., Nicosia, M.A., Green, S. and Fels, S.S. "An Image-based Model of Human Swallowing using Smoothed Particle Hydrodynamics" May 2014, *GRAND 2014 Research Notes*, Ottawa, ON.

**Ho A.K.**, and Fels, S.S. "A 3-Dimensional Computer Simulation of Swallowing using Smoothed Particle Hydrodynamics," May 2013, *GRAND 2013 Research Notes*, Toronto, ON.

#### Workshops

**Ho A.K.**, Fels, S.S., and Green, S. "A Viscous SPH Simulation Applied to Swallowing," February 2013, 1<sup>st</sup> International Workshop on Biomechanical and Parametric Modeling of Human Anatomy, Vancouver, BC.

Agrawal, S.K., Ladak, H.M., **Ho, A.K.** "Surgical Simulation in Otolaryngology," May 2010, *Canadian Society of Otolaryngology -* 64<sup>th</sup> Annual Meeting, Niagra Falls, ON.

## Honours and Awards

2<sup>*nd*</sup> place in the student research competition, \$300, 2014 SIGGRAPH Vancouver

Honourable Mention, "Footsy", IEEE Project Fair, 2012 University of British Columbia

Western Graduate Research Scholarship, 2008-2010 University of Western Ontario

NSERC Undergraduate Student Research Award, 2008 University of Western Ontario

## Teaching Assistantships

The University of British Columbia

EECE210 Object Oriented Programming

**EECE478** Computer Graphics

EECE355 Digital Systems and Microcomputers

EECE251 Circuit Analysis I

EECE259 Introduction to Microcomputers

EECE2XX Cognitive Sessions

The University of Western Ontario

ES1036 Introduction to C++

ES1050 Introductory Engineering Design and Innovation Studio

Last updated: August 19, 2014