



## SEMINAR

### Evaluation of Real-time Physics Simulation Systems

by

Adrian Boeing

Centre for Intelligent Information Processing Systems  
(CIIPS)

DATE/TIME: **Tuesday, 6 November 2007 at 4:00 PM**

VENUE: **Meeting Room 2.50 (2<sup>nd</sup> Floor)**  
School of Electrical, Electronic & Computer Engineering  
Electrical Engineering Building  
The University of Western Australia  
Fairway Entrance 2 and 3, Crawley (Perth)

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#### ABSTRACT:

We present a qualitative evaluation of a number of publicly available physics engines for simulation systems and game development. A brief overview of the aspects of a physics engine is presented accompanied by a comparison of the capabilities of each physics engine. Aspects that are investigated the accuracy and computational efficiency of the integrator properties, material properties, stacks, links, and collision detection system.

This presentation won the SONY COLLADA Prize.

Conference Name: EUROGRAPHICS 2007.  
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#### ABOUT THE SPEAKER:

Adrian Boeing received his BE (IT) in 2003 from The University of Western Australia where he is currently completing his PhD. In 2006 he worked for the Technical University Munich developing vision software for driver assistance systems and control software for a telerobotic manipulator. He has recently returned from Europe where he developed software for autonomous automobiles including lane keeping and car tracking applications at the University of the German Federal Armed Forces in Munich. Adrian is an active member of the local IT community as a cofounder of the Nullarbor game and demo development competition and the Perth Information Technology Societe.