

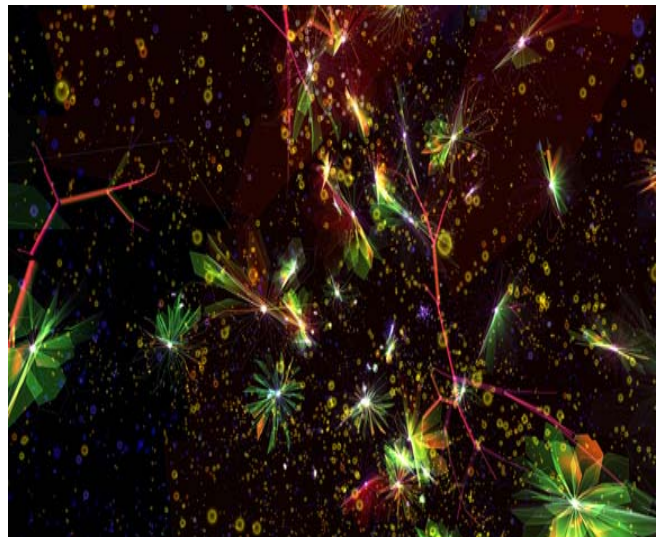
University of Akron  
Computer Science Colloquium

# Creating an Open World as an Infinite Game

**Graham Wakefield & Haru Ji**  
Media Arts and Technology  
University of California Santa Barbara

**Thursday, March 10, 2011**  
**1:45-2:45pm, LH307**

**Abstract:** While computation is generally considered as a utilitarian solution (problem solving), it also has great potential toward more open-ended goals. From the earliest pioneers, computation has been proposed as a method of research to uncover and understand causal relations of complex, adaptive and creative systems, such as market circulation, ecosystems and many aspects of living organisms. In this talk, we will introduce and distinguish notions of open versus closed systems and worlds, and infinite versus finite games. We will demonstrate our own sequential creative processes to construct open worlds as infinite games - using the art work series 'Artificial Nature' as a vessel - and describe systematic and implementation details from early prototypes to more recent developments.



**Graham Wakefield** (<http://www.grahamwakefield.net/>) is currently exploring the creation of music and art through the computational embodiment of creative becoming. He is a researcher for the AlloSphere (a multi-user spherical immersive instrument in the California Nano-Systems Institute) producing interactive environments for art-science research and co-developing an open-source multimedia framework (LuaAV). He is a software developer for Cycling '74 (Max/MSP). His works and publications have been performed, exhibited and presented at international events including SIGGRAPH, ICMC and ISEA. He is a Ph.D. candidate of Media Arts and Technology at the University of California Santa Barbara USA and graduated with a Master in Composition from Goldsmiths College, University of London UK and a BA in Philosophy from the University of Warwick UK.

**Haru Ji** (<http://haru.name/>) is a trans artist researching the subject of life in art through Artificial Life world-making: creating and evolving virtual ecosystems as immersive environments. She is a researcher in the AlloSphere Group at the California NanoSystems Institute. She has exhibited computational installations, digital sculptures, virtual architecture, video installations, sculptural objects and 3D animations at many exhibitions and art festivals worldwide such as ISEA, EvoWorkshops and SIGGRAPH, and has numerous publications. She is currently a Ph.D. candidate in Media Arts and Technology at the University of California, Santa Barbara. Haru attained a Master degree in Fine Arts and a Bachelor degree in Sculpture from Seoul National University and studied image engineering, computer graphics and 3D animation at Chung-Ang University, Seoul, Korea.