

**Nanyang Technological University  
School of Mechanical & Aerospace Engineering  
In Conjunction With  
ACM SIGGRAPH Singapore Chapter**

**Seminar Announcement**

**The Common Math Behind Computer Graphics, Discrete  
Event Simulations and Predictive Analytics**

**Speaker: Alain Chesnais  
ACM Distinguished Speaker and Past ACM President**

**Date: Friday, 19 Feb 2016**

**Time: 3:00 p.m.**

**Venue: LT 14 (North Spine), NTU**

*This seminar will be chaired by A/P Lee Yong Tsui*



**Synopsis**

This talk will cover the underlying mathematical concepts that we have used throughout our career to cover such varied topics as evaluating the probability of being in a deadlock situation in a massively distributed database using only locally available information, handling the probabilistic behaviour of large scale particle systems to model fluids and gases and then go more in depth into our current research into predictive analytics in social media to generate early warnings of what content is about to go massively viral.

**Speaker's Biography**

Alain Chesnais is co-founder and Chief Scientist at TrendSpottr, which develops web services to identify real time trends in social media such as twitter and Facebook. He was the CTO of SceneCaster.com before then and previously served as director of engineering at Alias|Wavefront managing the team that received an Oscar for developing the Maya 3D software package.

Chesnais studied at l'Ecole Normale Supérieure de l'Enseignement Technique and l'Université de Paris VII and XI, and where he earned a Maîtrise de Mathématiques, a Maîtrise de Structure Mathématique de l'Informatique, and a Diplôme d'Etudes Approfondies in Computer Science.

He is a long time ACM volunteer and served as President of the association from 2010 through 2012. Prior to his election as ACM president, Chesnais was vice president from 2008 through 2010 as well as secretary/treasurer from 2006 through 2008. He also served as president of ACM SIGGRAPH from 2002 through 2005 and as SIG Governing Board Chair from 2000 through 2002. He is a French citizen currently residing in Canada and has more than 30 years of management experience in the software industry.