# *Directing virtual worlds from script to screen*

## A talk

with

## RÉMI RONFARD

**Friday 12th of May 2017**
**h.11-13 a.m.**
**Università degli Studi di Torino**
**Campus Luigi Einaudi**
**AULA D2**

Narrative contents such as interactive games and animated movies are a major application domain for computer graphics, where the creation of 3-D content cannot be limited to the production of shapes and motions ; it should also include the necessary steps to organize shapes and motions into compelling stories, using adequate staging, directing and editing.



Video Game / Live Action / 3D Animation

In this talk, Remi Ronfard presents some recent work towards this goal. First, he will introduce the Prose storyboard language, a formal language for describing the movements of actors and cameras in movies, and how it can be used to direct the camera at a higher level than is usually possible in 3D animation. Then, he will present a new computational model of film editing and it how it can be used to create movies from suitably annotated 3D animation by solving a shortest path problem in a space of semi-markov chains. Finally he will conclude with a discussion of possible directions for story-driven animation tools working directly from script to screen.

The talk is presented as part of the Officine Sintetiche Lab project 2017. It is supported by the CRT Foundation and promoted by the University of Turin (CIRMA and Department of Humanistic Studies) in collaboration with the Polytechnic of Turin (Cinema and Media Engineering and Communication).



**Rémi Ronfard** is a research director at Inria with a 20 year experience in industry and academia in France, Canada and USA. He has worked at the T.J. Watson IBM Research Center in New York as post-doc and as a visiting scientist (1992 and 2000). His research work has been applied to digital storyboarding, aesthetic surface design, statistical analysis of film styles and action recognition from video. He has been an expert in the international MPEG group and has directed an R&D team on automatic cinematography and movie editing at Montreal-based startup Xtranormal Technologies. He is now the scientific leader of the IMAGINE research team at Inria and the University of Grenoble, where his research is devoted to designing novel interfaces between artists and computers (Intuitive Modeling and Animation for Interactive Graphics & Narrative Environments).