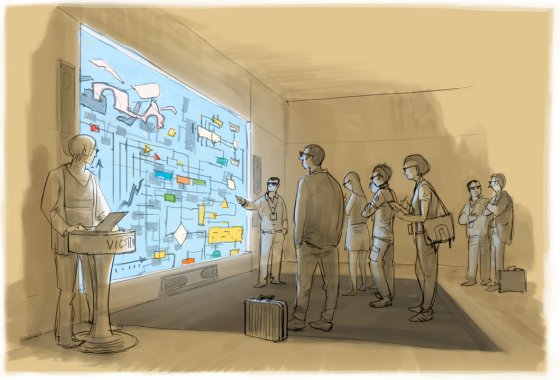
The VIC Sthlm Arena for Visualization, Interaction and Collaboration

Björn Thuresson

HCI Group, CSC, KTH

Abstract: VIC-Sthlm (http://www.vic-sthlm.se) is one of three Swedish knowledge arenas focusing on visualisation. Our mission is to coordinate and develop new and existing networks and activities within visualisation in the Stockholm region. We focus on business development and knowledge exchange between actors from industry, academia and the public sector. The knowledge arena is financed by KTH and a number of Swedish governmental agencies and research funding institutions.

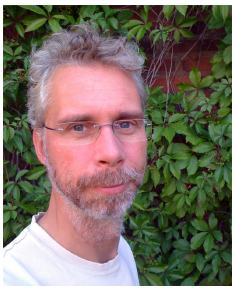


We have about 40 contributing partners from a wide range of domains, including software developers (QlikView, SightLine, Find-Out, Streamshed, Microsoft), hardware (SenseGraphics, Setred, Texas Intruments, Microsoft), data owners (Stockholms Stad, Sustainable Innovation), networks and public spaces (Kista Mobile Multimedia Network, Stiftelsen Elektrum, Dataspelsbranchen, Tekniska Muséet, Digital Arts Center, CineGrid) content developers (Dice, Avalanche, I3dv, Imagination Studios).

The talk will focus on concrete examples of what the collaboration has resulted in, like visualisations of the centre of the Milky Way, a game for Microsoft Surface, analysis of weather TV broadcasts, and more. I will also present the new Visualisation Studio currently being built. KTH and Linköping University recently received a significant grant from the Knut and Alice Wallenberg Foundation for acquiring a state-of-the-art visualisation infrastructure. At KTH, the infrastructure will be in the shape of a visualisation studio, hosted by the CSC School.

The overall goal of the infrastructure project is to strengthen visualisation and collaboration research in Sweden by, (1) supporting a number of selected strategic application areas for which improved visualisation will have a large impact, (2) enabling research focusing on the fundamental technical aspects of high-end visualisation within a wide range of application areas, (3) providing a collaborative test-bed between leading visualisation research sites, (4) support the development of principles for effective collaborative visualisation, and (5) enable research of the human and technical aspects of remote and local collaboration situations for situations with participant groups of various sizes.

The planned equipment for the KTH visualization studio includes an extremely high-resolution (4k) projector, a cinema-quality sound system, high-resolution video communication setups that allow for eye contact, a holographic display, a selection of multi-touch units, a set of haptic workstations, motion and eye trackers, and a supercomputing cluster for advanced calculations.



Biography: Björn Thuresson is a senior researcher at the School of Computer Science and Communication (CSC) at the Royal Institute of Technology (KTH) in Stockholm. He has a BA in Cinema Studies and Journalism (1991) and a MA in Cinema and Communication (1993). Thuresson has acted as research coordinator for the HCI group at KTH and managed several projects, e.g. coordinator for all research activities in European project

INSCAPE (Interactive Storytelling for Creative People), 2004-2008. Thuresson currently devotes all his time coordinating the VIC-Sthlm Knowledge Arena on Visualisation, http://www.vic-sthlm.se. Thuresson has a background in Cinema Studies and in production of film and educational multimedia and in concept development for new media. The research focus on interactive narratives, interaction design, methods for idea generation and prototyping, and overall design processes.