

TNM093

Tillämpad visualisering och virtuell verklighet

Jimmy Johansson
C-Research, Linköping University



C-RESEARCH



Kort om mig

- Läste Medieteknik 1998-2003
- Examensarbete vid Unilever Research, UK
- Doktorerade inom InfoVis 2003-2008
- Disputerade 2008
- Universitetslektor i informationsvisualisering
- Ansvarig för MT-utbildningen

Aim of Course

- använda vanliga tekniker för datautforskning och -analys, samt virtuell verklighet för att implementera tillämpningar inom visualisering och datorgrafik
- använda tracking och korrekt grafisk projektion för att implementera ett-till-ett-mappning mellan verkliga och virtuella koordinater
- använda vanliga programvaror och system för att implementera grundläggande multi-sensoriska interaktioner och visualiseringar

Teachers

- Dr. Jimmy Johansson (Information visualization), Course responsible
- Dr. Karljohan Palmerius (Virtual reality)
- Prof. Ingrid Hotz (Scientific visualization)
- Rickard Englund, Sathish Kotttravel, Ali Samini (Lab assistants)

Course Structure

HT1

- Intro+VR
- VR lectures
- VR Labs
- VIS lectures
- VIS Labs

HT2

- VIS Lectures
- VIS Labs
- .
- .
- .
- VIS + VR Labs

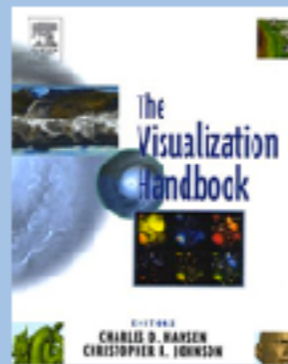
Examination

- Laboratory work, 6hp
- Examination
 - ▶ VIS: performed during the labs
 - ▶ VR: specific dates will be announced
- Note! Extensive labs
 - ▶ Total study time for all labs is 140 hours
 - ▶ Lab sessions for getting help
 - ▶ Requires self-studying

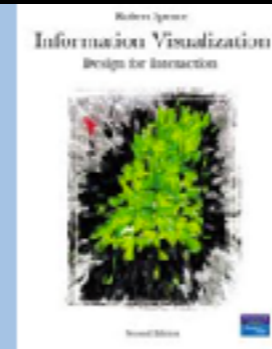
Examination

- 2 lab groups. Groups A and B.
- 2 students in each group
- VR Labs will be in K4504 and in the VR lab in the visualization centre (need to sign a form for using the VR lab)
- VIS Labs will be in TP4003 and TP4004

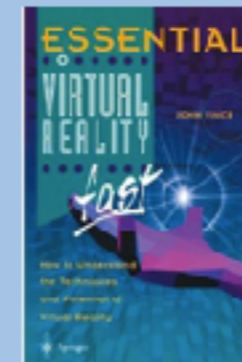
Course Literature



The Visualization Handbook,
Charles Hansen and Chris
Johnson. ISBN: 012387582X



Information Visualization:
Design for Interaction (2nd
Edition), Robert Spence.
ISBN: 9780132065504



Essential Virtual Reality Fast,
John Vince. ISBN:
1852330120

Improvements since last year

- KURT average ~ 3.3
- Extensive remake of labs
- Order of lectures and labs changed

Course webpage

***[http://webstaff.itn.liu.se/~jimjo/
courses/TNM093](http://webstaff.itn.liu.se/~jimjo/courses/TNM093)***