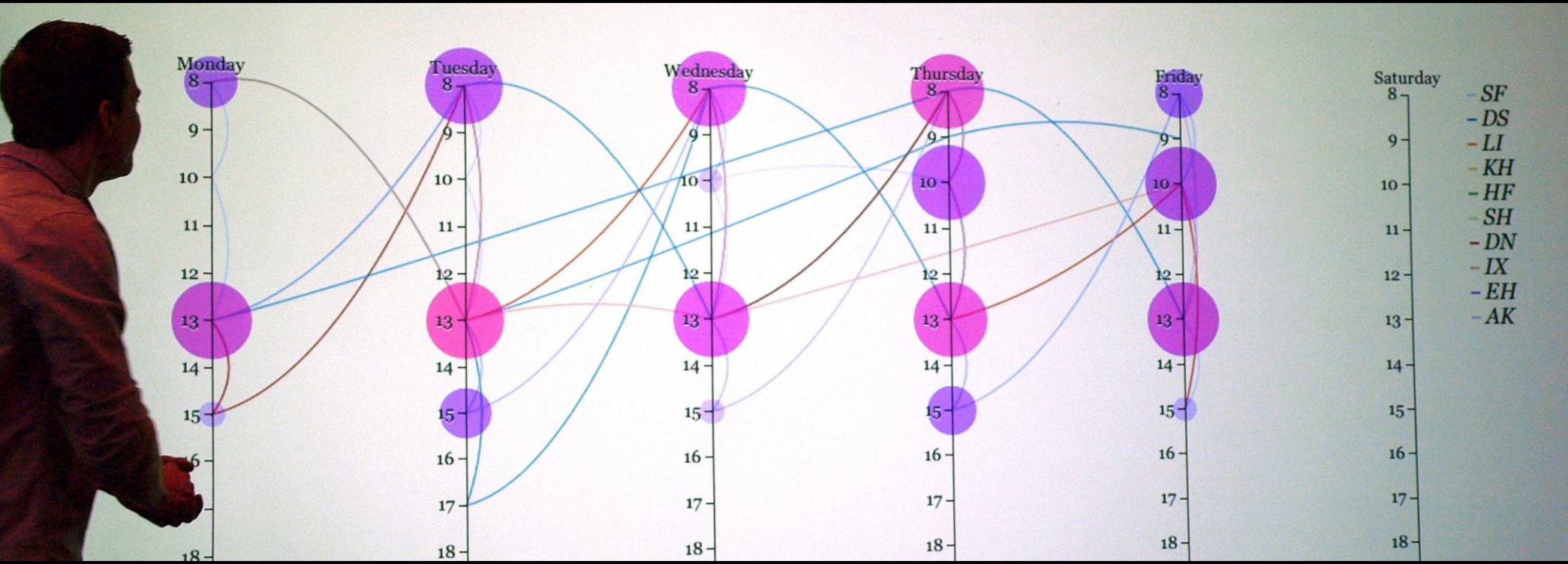
Please, follow these pages now.

VisualizationStudio

/groups/ivis16/

Mario Romero
2016/01/19

Information Visualization IVIS16 – Lecture 1



IVIS13 student Markus Felldin presenting his parallel coordinate visualization for scheduling.

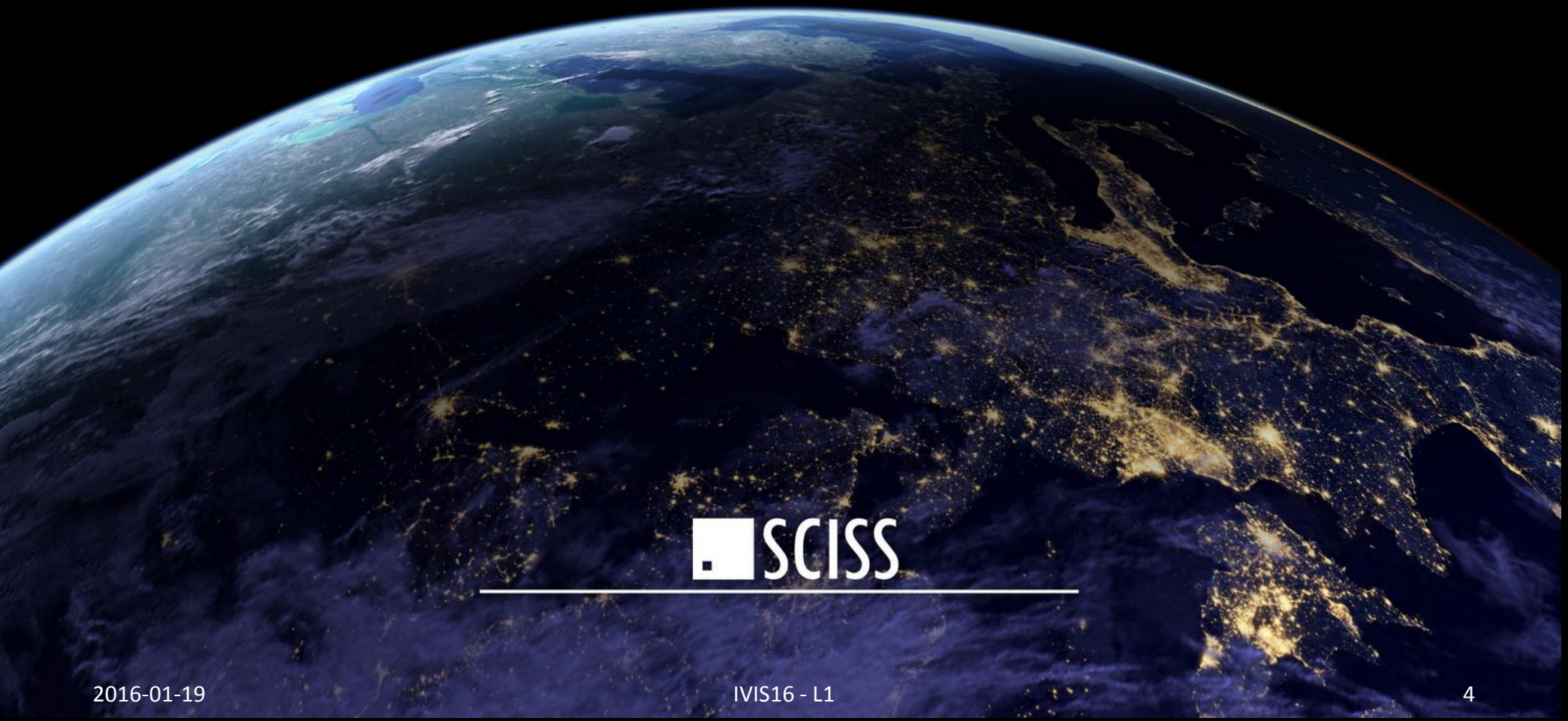
KTH VETENSKAP OCH KONST

VICSTHLM
VISUALISATION INTERACTION COLLABORATION

Outline

- Introduction
  - Uniview
  - Visualization Pipeline
- What is IVIS16?
- What is the Visualization Studio?
- How do I teach?
- 15:05-15:10 Who am I?

Uniview



Answer the following questions about Uniview

1. Who is the user?
2. What are the tasks?
3. What is the data?
4. What are the data transformations?
5. What are the visual mappings?
6. What are the visual structures?
7. What are the view transformations?
8. What are the views?
9. How does the demo support the tasks?
10. How can it be improved?

The art of helping people paint ideas from data.

INFORMATION VISUALIZATION

IVIS14 final demo in VIC

What is IVIS16?

IVIS16

1. Create fully-functioning information visualization systems that facilitate actionable insight through interactive data transformations, visual mappings, and view transformations.
2. Defend your design choices.
3. Constructively criticize other information visualization systems.
4. Explain and demonstrate your information visualization systems to wide audiences, from novices to experts.
5. Elicit constructive criticism from users of your information visualization systems.

Your Grades

• Project 1	individual	due:	Jan 29 8:00	15%
• Project 2	individual		Feb 12 8:00	15%
• Project 3	individual / group		Feb 26 8:00	15%
• Project 4	group		Mar 18 8:00 – April 1 (C-Awards)	45%
• Readings	individual		weekly	10%

Green Hackathon – group project 3 → 4

Project 1 due Jan 29 8:00

- Fill self-intro survey by 23:55 20.1
- Data – IVIS16 self-introduction survey
- Goal – create the best groups of 6 or 7
  - Document the visualization pipeline of your process
- Method – visualize!
  - By hand
  - Photoshop/GIMP
  - Illustrator/Inkscape
  - Excel
  - Matlab
  - D3.js
  - Processing.org
  - ….

Readings for Next Tuesday Jan 26

- Introduction to Information Visualization pdf – Riccardo Mazza
- The Eyes Have It
  – Ben Schneiderman
- Low-Level Components of Analytic Activity in Information Visualization – pdf – Robert Amar, James Eagan, and John Stasko

IVIS16 Schedule

1.	**Tuesday**	**19.1**	**13:15**	**Intro**	**DUE:**
2.	Tuesday	26.1	13:15	Lecture 2	Reading 1
3.	Friday	29.1	08:30	Lectures 3, 4 (labs)	Project 1, Form Group
5.	Tuesday	02.2	13:15	Lecture 5	Reading 2
6.	Tuesday	09.2	13:15	Lecture 6	Reading 3
7.	Friday	12.2	08:30	Lectures 7, 8 (labs)	Project 2, Proposal
9.	Friday	19.2	08:30	Lecture 9	Reading 4
10.	Tuesday	23.2	13:15	Lecture 10	Reading 5
11.	Friday	26.2	08:30	Lectures 11, 12 (labs)	Project 3, Hello World!
13.	Tuesday	01.3	13:15	Lecture 13	Reading 6
14.	Friday	11.3	08:30	Lecture 14	Reading 7
15.	Friday	18.3	08:30	Final Demo (exam)	Project 4 Final Demo
16.	Thursday	14.4		C-Awards	

What is the Visualization Studio?


VICSTHLM
VISUALISATION INTERACTION COLLABORATION


KTH
VETENSKAP
OCH KONST


LINKÖPINGS UNIVERSITET
LINKÖPINGS UNIVERSITET


NORRKÖPINGS
VISUALISERINGSCENTER


Knut och Alice
Wallenbergs
Stiftelse

The Team

Björn Thuresson
VIC director

Coordinate
Projects
Events

Eirk Dahlbergh
VIC Engineer

Technical Support
Ideation
Critical Feedback

Mario Romero
AGI14 Coach

Guidance
Focus
Support

The Studio

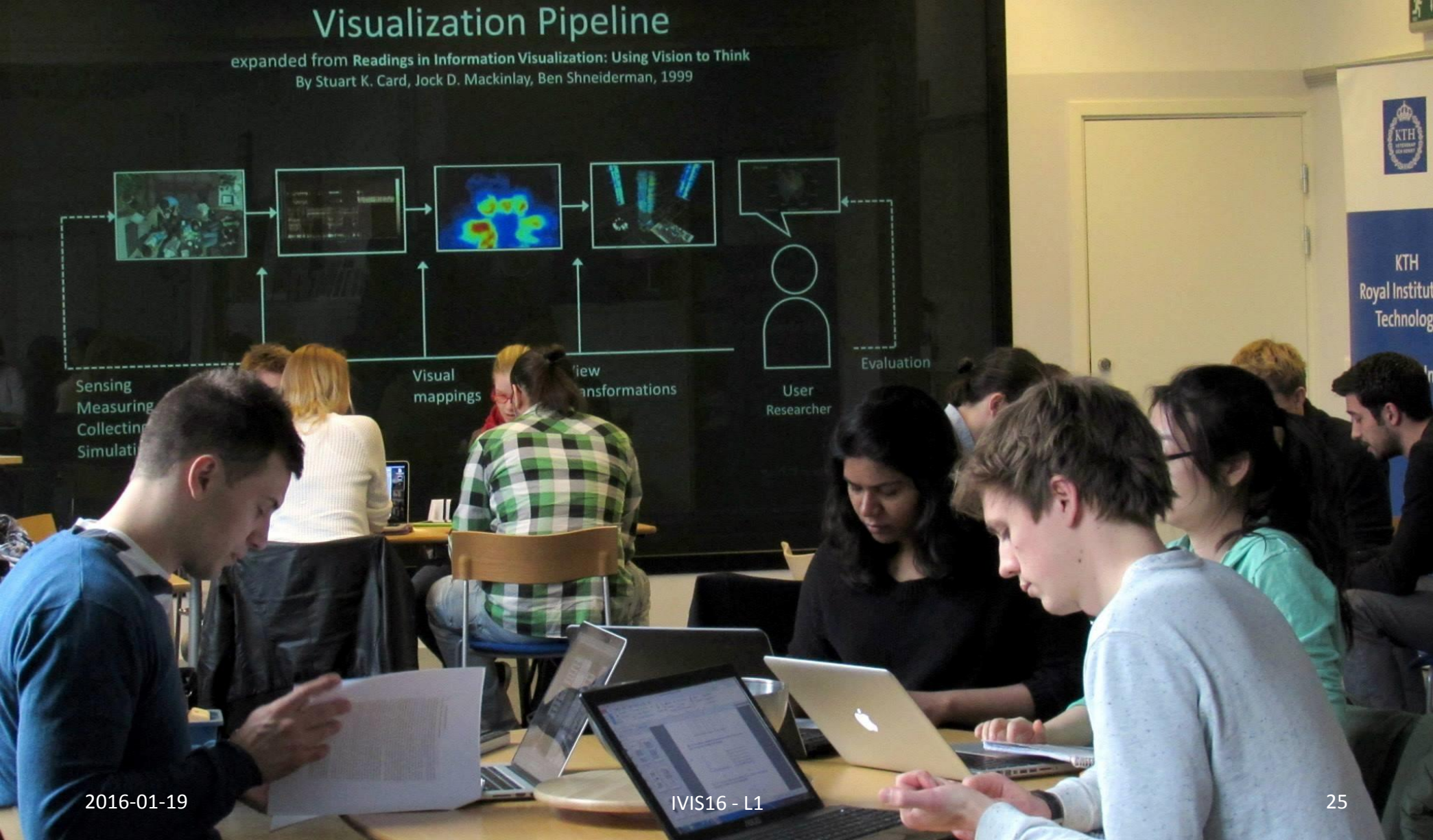
Students' Resources: Visualization Studio

- Research
  - Visualization Supported Collaborative Work
  - Foundational Technology
  - User Evaluations
- Showcase and classroom environment
- Outreach

Technologies in VICSTHLM

VISUALISATION INTERACTION COLLABORATION

- High-resolution projection wall with stereoscopy
- Oculus Rift
- Cinema quality audio
- High-definition video communications with eye contact
- Holographic display
- Multi-touch interactive surfaces
- Eye tracking
- GPU-based computing cluster
- Diverse interaction and sensor systems (haptic, mocap, etc.)
- Haptic Devices
- 3D printer


Visualization Pipeline
expanded from Readings in Information Visualization: Using Vision to Think
By Stuart K. Card, Jock D. Mackinlay, Ben Shneiderman, 1999
Sensing
Measuring
Collectin
Simulati
Visual
mappings
iew
nsformations
User
Researcher
Evaluation
KTH
Royal Institut
Technolog

Installing the 4K Wall




Studio Contacts

- Webpage
- Directions
- Map
- Booking
- Björn Thuresson

Contact Mario

- Office:
  - Lindstedtsvägen 5 – 4417
  - VIC
- marior@kth.se
- Mobile (txt or call) 076 258 1802
- www.kth.se/profile/marior/
- www.facebook.com/marioromero73
- twitter.com/MarioRomero73
- www.linkedin.com/in/marioromero

Next Time

- Present more IVIS projects from the past
- Visualization Pipeline
- The Eyes Have it
- High- and Low-level tasks in Information Visualization
- Questions about project 1

IVIS15 students

Thank you!

marior@kth.se