Course Title:
Introduction to Information Visualization

Course Number:__98720_____
Number of credit points__2__
Mini-Semester:___ of the Academic Year: _2019_____
Time: (Day & Hour) __Fridays, 09:00-12:30_____

Course Instructor: Dr. Peter Bak

E –mail: **peter.bak@il.ibm.com**
Telephone: **052-6677988**
Meeting time for students: **by appointment only**

Teaching Assistant: _____

E –mail:
Telephone:
Meeting times for students:_____ (or by appointment)

Syllabus: (choose and get into details of the relevant parts)

Course Objectives:

The course intends to teach visualization design and analysis and provide hands-on experience in creating interactive visualizations on real-world data. Students will be exposed a wide range of information visualization techniques in a systematic way based on a strong theoretical background and scientific approach.

Course Content & Scope:

The course content starts with theoretical background on visualization analysis and design. The scope will include selected topics on information visualization consisting of space, time, networks, multidimensional attributes and sets visualization. The scope will extend to applied information visualization in science and technology.

Teaching Methods:

Presentation slides

Teaching Materials:
Power Point slides, Selected Readings

Readings (Compulsory / Recommended):
T. Munzner: Visualization Analysis and Design, https://www.cs.ubc.ca/~tmm/vadbook/

M. Ward et at. Interactive Data Visualization. Foundations, Techniques and applications, http://www.idvbook.com/

D. Murray: Tableau Your Data,
https://tanthiamhuat.files.wordpress.com/2015/07/tableau-your-data.pdf

Student Assessment:
Individual Project: 70% (PDF file per email-attachment)
Presentation: 20%
Participation: 10%
Submission date of the project: _2.5.19_____

Course Plan

Lesson 1. 25.10
Motivation for Interactive Visualization (Lecture Slides)

Lesson 2. 1.11
Visualization Analysis and Design (Lecture Slides, and Readings)

Lesson 3. 8.11
Space- and Time-oriented data visualization (Lecture Slides)

Lesson 4. 15.11
Visualization of Multidimensional Data, Sets, and Networks (Lecture Slides)

Lesson 5. 22.11
1 Dataset – 25 Visualizations (Lecture Slides and Hands-On)

Lesson 6. 29.11
Introduction to R and D3 (Hands-On)

Lesson 7. 6.12
Selected Topic / Guest Lectures