Introduction

- **Visualisierung 2**
  - VU, 4.5 ECTS
  - Mandatory for master study Visual Computing (Computer Graphics)
- **Informationsvisualisierung (InfoVis)**
  - VO, 3.0 ECTS; LU 1.5 ECTS
  - Is offered in a combined VU-mode (VO and LU together)
  - Optional for master study Visual Computing

Goals

- Theoretical:
  - Get a specialized knowledge in the field of visualization/information visualization
  - Be able to study a state-of-the-art topic in visualization
- Practical:
  - Be able to implement a state-of-the-art visualization technique

How to achieve these Goals?

- Lectures:
  - A serious of lectures throughout the semester
- Re-implementation of a research paper:
  - Find an interesting research paper in the field of visualization (we also provide a list of possible papers)
  - Read and understand the paper
  - Re-implement the proposed technique in the paper

Lectures

- Find dates on the webpage:
  - [http://www.cg.tuwien.ac.at/courses/Visualisierung2/](http://www.cg.tuwien.ac.at/courses/Visualisierung2/)
  - [http://www.cg.tuwien.ac.at/courses/InfoVis/](http://www.cg.tuwien.ac.at/courses/InfoVis/)
- **Visualisierung 2**:
  - Oral exam at the end of the semester
- **InfoVis**: 
  - VO + LU:
  - Attendance during the lectures (attendance list will be provided in the first lecture 20.03.2012)
  - Only VO:
  - Oral exam at the end of the semester
Re-Implementation of a Research Paper

Tasks:
- Find a colleague (group of 2 is preferred)
- Select a paper (from the list on the webpage)
  - You can propose your own selected paper
- Read/Understand the paper
- Write a short summary (official registration)
- Present the paper
- Re-implement the paper
- Present your implementation

Implementation

- Group of 2 students
- Implementation of the algorithm/technique of the selected paper
- Programming language/platform can be chosen freely
  - E.g. WebGL, Volumeshop (C++, GLSL), …
  - PC, Laptop, Mobile Devices
- It is allowed to use existing libraries
  - For the grading we consider the overall effort
  - Per student we expect an approximate effort of 80-100 hours in total

Important Dates

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<thead>
<tr>
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<th>Visualisierung 2</th>
<th>InfoVis</th>
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<tbody>
<tr>
<td>Submission of the paper summary</td>
<td>until 21.03.2012</td>
<td>until 16.03.2012</td>
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<tr>
<td>Presentation of the paper</td>
<td>28.03.2012</td>
<td>22.03.2012</td>
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<tr>
<td>Submission of the final application (incl. documentation)</td>
<td>until 13.06.2012</td>
<td>until 14.06.2012</td>
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<tr>
<td>Review of the application</td>
<td>18.06.2012</td>
<td>20.06.2012</td>
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<td>Oral exam</td>
<td>18.06.2012</td>
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<tr>
<td>Presentation of the implementation</td>
<td>20.06.2012</td>
<td>21.06.2012*</td>
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<td>* At this date the BEST APPLICATIONS will be awarded!</td>
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Send all your submissions via e-mail to Georg Molzer (georg.molzer@student.tuwien.ac.at)

First Steps

- Form a group
- Go through the list of papers and find an interesting topic for you!
  - Also consider that you have to find (or maybe generate) data sets as input
- Notify Georg Molzer about your choice
- Write a short summary (1-2 A4 pages, PDF)
  - Including first implementation details (language, platform, libraries, …)
- Send the summary to Georg Molzer

Grading

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<th>InfoVis</th>
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<tbody>
<tr>
<td>Summary of the paper</td>
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<tr>
<td>Presentation of the paper</td>
<td>5%</td>
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<tr>
<td>Implementation (incl. documentation)</td>
<td>40%</td>
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<tr>
<td>Oral exam</td>
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<tr>
<td>Attendance</td>
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<td>25%</td>
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<tr>
<td>Presentation of the application</td>
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Grades:
- > 87% 1
- > 75% 2
- > 62% 3
- >= 50% 4
- < 50% 5
Questions?

- Any questions?
- All the information (including these slides) are available on the homepage:
  - http://www.cg.tuwien.ac.at/courses/Visualisierung2/
  - http://www.cg.tuwien.ac.at/courses/InfoVis/