

COMPSCI 715S1C 2004
Advanced Computer Graphics

SIGGRAPH 2004 Project

Lecturer: Kevin Novins

Aims:

- To study the latest research in computer graphics
- To develop research, writing and presentation skills.
- To work together to enhance individual performance

Overview:

The main purpose of the SIGGRAPH 2004 project is to explore some of the latest research in computer graphics. To gain in-depth understanding, you'll have to read a preprint of a paper to be published in August at SIGGRAPH 2004, find other sources on the topic, and do some implementation as part of a group project.

Written and oral presentations are meant to share your newfound knowledge with your classmates. Ultimately, the final exam will gauge your understanding of all of the topics, not just the one that your group studied.

Assessment Overview:

- 1.0 marks Group project initial meeting with Kevin and project proposal (Week 2)
- 1.0 marks Group progress meeting with Kevin (Week 3)
- 1.0 marks Group preliminary presentation (Week 3)
- 5.0 marks Group final written report (Week 5)
- 6.0 marks Group final implementation project and final presentation (Weeks 5-6)

Assessment totals to 14% of the marks for COMPSCI715. In cases of academic dishonesty such as cheating or plagiarism, all these marks are at risk of penalties. Individual participation and preparation in this project counts for another 3.5% of the marks in the course.

Lecture Session Calendar:

Tuesday	Wednesday	Friday
<i>27 April</i> Introductory Lecture	<i>28 April OPTIONAL</i> Video	<i>30 April</i> Topic Selection
<i>4 May OPTIONAL</i> 2003 Keynote Address	<i>5 May OPTIONAL</i> Review of the Test	<i>7 May</i> No Session - Graduation
<i>11 May OPTIONAL</i> 2003 Electronic Theatre I	<i>12 May OPTIONAL</i> SIGGRAPH 2003 Review	<i>14 May</i> Preliminary Presentations
<i>18 May OPTIONAL</i> 2003 Electronic Theatre II	<i>19 May OPTIONAL</i> Billboard Clouds	<i>21 May OPTIONAL</i> Q&A Session
<i>25 May OPTIONAL</i> The Night Sky	<i>26 May</i> Peer Review	<i>28 May</i> No Session – Projects Due
<i>1 June</i> Presentations	<i>2 June</i> Presentations	<i>4 June OPTIONAL</i> Q&A Cafe

Week One: Topic Selection

At the Friday session this week, we'll be dividing into groups and assigning each group to a topic. You have a choice of creating your own group or being assigned to a group. If you want to create a group, you have until twenty minutes after the start of the session to do so. Anyone not in a group by then will be assigned to a group. Rebalancing may have to take place because the groups are constrained not to have any pair of people from the same SIGGRAPH 1984 group. Each group will then pick one of the available topics. Each group needs a different topic; clashes in interests will be resolved by randomly assigning priorities to groups.

At the end of the session, a sign up sheet will be available for meetings with me. All groups must have a 30 minute meeting on Wednesday of Week 2.

Week Two: Topic Analysis and Group Meetings

At the time of the meeting, each group is to hand in a short project proposal that defines the scope of the project and how the work will be divided. The proposal should answer the following questions: What are the three most important areas of background knowledge for understanding this paper? What are three areas of the paper that are most difficult to understand (be specific)? What implementation are you proposing to do (need not be the whole paper and may include implementing other techniques)? What experiments will you run using your code and what will you learn from them? What resources are available (literature, tutorials, code available on the web, data available on the web)? How will you divide up the work?

Week Three: Project Progress Meetings and Presentations

On Tuesday this week, I'll meet again with each group to check its progress. If anything seems to be going wrong with your project, we'll try to fix it at these meetings.

On Friday 14 May, each group will give a presentation explaining its topic and its results so far. Each presentation will be only 6 minutes long (strictly enforced), so be efficient about how you present your material. Not all group members have to be presenters. There will be time for 5 minutes of questions for each group. Your group will be assessed both on the quality of its presentation and the quality of the questions it asks of other groups.

Submit: Group leaders to submit their groups' preliminary presentation slides by 4:00pm on 14 May.

Week Four: Work On Projects

Week Five: Projects Due

On Wednesday there will be a peer review session. All groups are required to bring five printed copies of a substantial draft of their project report. We'll exchange reports and individuals will give feedback for improvement. Since the primary purpose of the report is to educate your classmates, this feedback is important.

There will be no session on Friday. This is the due day for the projects. In addition to project source code, each group must complete a written report. Details will be provided later. Ultimately, the project code and written reports will be made available in the course's afs directory.

Submit: Five printed copies of the report draft at the start of the lecture session on 26 May. Project leaders to submit all source code for their project and the group's written report. These are due in the assignment drop box by 9:55am on 28 May. However, to account for minor illnesses and other small catastrophes submissions will be accepted without penalty until 5:00pm on 30 May. No submissions accepted after 5:00pm on 30 May.

Week Six: Group Presentations

The Tuesday and Wednesday lectures this week will be devoted to the groups' presentations of their projects. Each presentation must include a demo of the groups' software. Presentations will be 13 minutes long with 10 minutes for questions.

By the end of this week, each student must submit a self-evaluation of their project and their own role in it. Details will be provided later. Self-evaluations will be kept confidential.

Submit: Project leaders to submit the slides for their group's presentation to the assignment dropbox by 4:00pm on 2 June. No late submissions accepted. Each student to submit a self-evaluation to the assignment dropbox by 4:00pm on 4 June. No late submissions accepted.