

## 15-869 Assignment 0: Paper selection

Due Tuesday, Jan 21st

One goal that I have for all of you for this course is that you read one paper (or collection of related papers) in great detail, so that you understand it inside and out.

Following this goal, your first assignment is to select a collection of papers and/or topics that you find most interesting. Based partly on these choices, I will put together a syllabus, and later in the semester, you will be given one class period to present one of your selected papers or topics and lead a discussion. You and I can talk well beforehand about how to organize the class – e.g., if there is supplementary mathematical or historical material that should also be presented to aid understanding and context of the core research that you will present. If you work better as a team, you may choose to do this project together and team-lead two classes. I am open to suggestions for whatever works best for you.

For now, I would like you to browse through recent conference proceedings and journal articles to identify papers and topics of interest. If you know the topic you would like to study, but are not finding the relevant papers, send me an email and I can help dig up the important, classic, and/or recent papers in that area.

Here are the ground rules:

- Email me [nsp@cs.cmu.edu](mailto:nsp@cs.cmu.edu) a list of your top 5 paper and/or topic choices by the deadline.
- Earlier is better, as it will help me organize the syllabus and help make sure you get your first choice
- Papers ideally will have been published in 2013, 2014, or currently in press, so that we can get a view into the very most recent research. I will make exceptions for important / classic papers, better papers that were published earlier, or topics that are important but for some reason have no recent noteworthy publications.
- Papers must be on a topic related both to physics and to character animation in some way – you make the argument!
- You may want to check:
  - Proceedings of SIGGRAPH 2013: <http://kesen.realtimerendering.com/sig2013.html>
  - Proceedings of SIGGRAPH Asia 2013: <http://kesen.realtimerendering.com/siga2013Papers.htm>
  - Proceedings of SCA 2013: <http://kesen.realtimerendering.com/sca2013Papers.htm>
  - Other proceedings, including Eurographics, Pacific Graphics, Non-photorealistic Animation and Rendering, Computer Animation and Social Agents, Graphics Interface may also have some stellar animation papers. Papers from many of these conferences can be accessed from the pages maintained by Ke-Sen Huang: <http://kesen.realtimerendering.com/>

- Journals provide a more in-depth treatment of topics. Check out the 2013/2014 table of contents for:
  - ACM Transactions on Graphics: <http://tog.acm.org/>
  - IEEE Trans. on Visualization and Computer Graphics: <http://www.computer.org/portal/web/tvcg/>
  - IEEE Computer Graphics and Applications: <http://www.computer.org/portal/web/cga/home>
  - Other journals to consider include Presence, Graphical Models, Computer Graphics Forum, and the Visual Computer.
  - You may also want to consider the vast body of research on human movement or on robotics. If you are interested in a topic related to either of these fields, let me know, and I may be able to help you find pointers to start searching.
  
- Then of course you can do a topic-based search and discover your own sources. Google scholar is excellent for this.