

15-464/15-664 Technical Animation Assignment 0: Paper selection

Due Wednesday, Jan 25th

One of the goals of this class is to learn about cutting edge research in the area of technical animation. You will have the chance to explore in depth at least two topics of your own choosing during the course – first through presentation of a recent research paper, and second through your choice of a final project. Follow your own interests and have some fun with this!

10% of your grade for this class will come from an in-class presentation of a recent research paper. Your assignment due Wednesday, Jan 25th is to select which papers you would like to present. Note that you only need to present one paper. However, I would like a list of your top 5 choices so that I can resolve conflicts between students having the same top choice and to help me customize the course syllabus. Here are the ground rules:

- Email me 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 2022 (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, or topics that are important but for some reason have no recent noteworthy publications.
- Papers must be on a topic related to technical animation – you make the argument!
- You may want to check:
 - Proceedings of SIGGRAPH 2022: <https://kesen.realtimerendering.com/sig2022.html>
 - Proceedings of SCA 2022: <https://kesen.realtimerendering.com/sca2022Papers.htm>
 - Proceedings of SIGGRAPH Asia 2022: <https://kesen.realtimerendering.com/siga2022Papers.htm>
 - Other proceedings, including Eurographics, Interactive 3D Graphics and Games, Motion in Games, Expressive Symposium, Pacific Graphics, Computer Animation and Social Agents, Graphics Interface, and SIGCHI 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/>. Others you will have to search out individually.
- Journals provide a more in-depth treatment of topics. Check out the 2022 table of contents for:
 - ACM Transactions on Graphics: <https://dl.acm.org/loi/tog/group/d2020.y2022>
 - IEEE Trans. on Visualization and Computer Graphics: <https://ieeexplore.ieee.org/xpl/issues?punumber=2945&isnumber=10003072>
 - IEEE Computer Graphics and Applications: <https://ieeexplore.ieee.org/xpl/issues?punumber=38&isnumber=9984046>
 - Other journals to consider include Presence, Graphical Models, Computer Graphics Forum, and the Visual Computer.

- You may want to consider the vast body of research on human movement. There are also relevant papers to be found in robotics. If you are interested in a topic related to either of these research areas, 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! If you have a specific topic in mind and are struggling to find papers, talk with me and the TA – we can help you to find some options.