Oregon State University

CS 550 -- Fall Quarter 2025

Paper Analysis Project

100 Points

Due: Sunday, December 7, 23:59 No Bonus Days

Note:
This project is for CS 550ers only!
CS 450ers are welcome to do it, but it won't count for anything.

This page was last updated: September 9, 2025

Introduction

The project requires you to read a computer-graphics-related paper and write a 5-page (1.5 spacing) analysis of it.

Learning Objective:

When you are done with this assignment, you will have had the chance to increase your graphics knowledge byu reading and analyzing a research paper.

Instructions:

I have collected several possible papers for you to review. Here is the list:

- Accelerating Vector Graphics Rendering using the Graphics Hardware Pipeline

- audeosynth: Music-Driven Video Montage

- Augmented Airbrush for Computer Aided Painting

- Computational Bodybuilding: Anatomically-based Modeling of Human Bodies

- Computational Design of Twisty Joints and Puzzles

- Conformal Mesh Deformations with Mobius Transformations

- Dynamic 3D Avatar Creation from Hand-held Video Input

- Elastic Textures for Additive Fabrication

- [Foldabilizing Furniture](#)

- [GRIDiron: An interactive authoring and cognitive training foundation for reconstructive plastic surgery procedures](#)

- [Learning Shape Placements by Example](#)

- [Microstructures to Control Elasticity in 3D Printing](#)

- [Restoring the Missing Vorticity in Advection-Projection Fluid Solvers](#)

- [Realistic Biomechanical Simulation and Control of Human Swimming](#)

- [Semantic Shape Editing Using Deformation Handles](#)

- [Space-time sketching of character animation](#)

- [Style Compatibility for 3D Furniture Models](#)

You can also find your own paper, but it must be a real "research" paper, not an article or a blog entry. Also, I must approve it before you go too far in reading and analysing it.

You do not need to understand the equations in the paper. Just understand the general themes of the paper -- what they are doing, why are they doing it, how they are trying to do it, anything that relates to what we have been doing in class, etc.

You can include images from the paper in your paper. Don't go crazy with this as a way to avoid writing.

The 5-page Paper You Submit Must At Least Cover

1. What is the general theme of the paper you read? What does the title mean? What are they trying to do? Why are they trying to do it? (I.e., what problem are they trying to solve?)

2. Who are the authors? Where are they from? What positions do they hold? Can you find out something about their backgrounds?

3. What did the authors do?

4. What conclusions did the paper draw?

5. What insights did you get from the paper that you didn't already know?

6. Did you see any flaws or short-sightedness in the paper's methods or conclusions? (It's OK if you didn't.)

7. If you were these researchers, what would you do next in this line of research?

You can, and should, copy-and-paste a key image or two from the paper to help explain what it is about. *Such images don't count towards your "5 pages".*

Spacing needs to be 1.5

There needs to be a cover page, and, no, that doesn't count as one of the 5 pages...

Turn-In:

This paper should be turned in as a PDF file on Canvas. It is due 23:59:59 on the listed due date.