CMPT 466 - D100 Animation

Instructor(s): KangKang Yin

Calendar Objective/Description:
Topics and techniques in animation, including: The history of animation, computers in animation, traditional animation approaches, and computer animation techniques such as geometric modeling, interpolation, camera controls, kinematics, dynamics, constraint-based animation, realistic motion, temporal aliasing, digital effects and post production.

Instructor’s Objectives:
Topics and techniques in computer animation, including: The history of animation, traditional animation, 3D model representation, mesh processing, kinematic animation, motion capture, particle systems, mass-spring systems, physics-based animation, character animation, soft objects and deformation, learning-based animation methods.

Prerequisites:
CMPT 361 and MACM 316 or permission of the instructor.

Topics:
- history of animation
- traditional animation
- 3D model representation
- mesh processing
- kinematic animation
- motion capture
- particle systems
- mass-spring systems
- physics-based animation
- character animation
- soft objects and deformation
- learning-based animation methods

Grading:
To be discussed the first week of classes

Recommended Books:

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).