October 1, 2012 - April 31, 2013 Plan

The goal of this work period is to complete the RTFX framework, leaving it in a usable state for Side Effects, SIRT, and my own thesis-related interests.

At the end of this time period, RTFX will be in a state to produce at least two papers (previously described, one may be produced halfway through this period). It will also be in a state to create a "language of film" visualization tool to turn a cinematographic language into test animations.

Work Remaining on RTFX Framework

1. Clean up existing codebase, adjusting/simplifying variable names and implementing missing destructors.
2. Performance characteristics of original prototype, benchmark it!
   a. Capable throughput, delays, etc.
   b. In future tests we'll use:
      i. film-size meshes
      ii. lots of small meshes
3. Add generic properties to RTFXObject. These properties will store additional, non-standard parameters of objects. For example, additional vertex properties.
4. Re-work RTFXMeshes to include the above upgrades for new system.
5. Create RTFXObject for storing images/vector/audio/raw (textures, bump maps, backgrounds, etc, other files).
6. Create RTFXObject to represent particle systems (I imagine most of this implementation will be handled through generic properties?)
7. Create RTFXObject for storing animation curves (useful/standard for camera/actor motion).
8. Create RTFXObject for bones and skeletons.
9. Message encoding/transmission speed and implementation improvements.
10. Speed, testing and evaluation of paper progress
11. Linux build -- to ensure agnostic framework.
12. Houdini and Unity Client upgrades to include work of (3-8)

Timeline

Time Period	Tasks (from above)
Sept 24 - Oct 5	1 + 2 + IPDPS Paper Deadline + NSERC Deadline + Midterm Marking [#1 IN PROCESS DURING REFACTOR]
Oct 8 - Oct 12	2 + website construction [COMPLETED]
Oct 15 - Oct 19	3 [COMPLETED], 4 [COMPLETED]
Oct 22 - Oct 26	Convert boost::asio packetization to streaming data (reduce processing time)
Oct 29 - Nov 2	Two-way communicative plug-in for Unity & Houdini
Nov 5 - Nov 9	Two-way communicative plug-in for Unity & Houdini
Nov 12 - Nov 16	5
Nov 19 - Nov 23	5
Nov 26 - Nov 30	AWAY 27-28-29
Dec 3 - Dec 7	6
Dec 10 - Dec 14	6
Dec 17 - Dec 21	6

Dec 24 - Dec 27	7
Dec 31 - Jan 4	7
Jan 7 - Jan 11	7
Jan 14 - Jan 18	8
Jan 21 - Jan 25	8
Jan 28 - Feb 1	9
Feb 4 - Feb 8	9
Feb 11 - Feb 15	9
Feb 18 - Feb 22	9
Feb 25 - Mar 1	10
Mar 4 - Mar 8	10
Mar 11 - Mar 15	11
Mar 18 - Mar 22	12
Mar 25 - Mar 29	.
Apr 1 - Apr 5	.
Apr 8 - Apr 12	.
Apr 15 - Apr 19	.
Apr 22 - Apr 26	.
Apr 29 - May 3	.
May 6 - May 10	.
May 13 - May 17	Packaging and final documentation
May 20 - May 24	.
May 27 - May 31	.