|  |
| --- |
| 3D Telepresence Project |
| Realtime HDR Imaging |
| Git Log --stat |

This file contains the timestamped actions during the software integration phase of the project. Most glsl developments and tests were performed using the online editing environment ShaderToy.com due to minimal setup and powerful preview tools.  
  
 Additional project related files are also contained in the repository as a central reference.

Using Git/source management tools is an important part of any software project regardless of team size.

Git allows for full tracked edit history of files and allows for robust file tracking and distribution between development platforms, University computers and personal devices.

|  |
| --- |
| Scott Rapson  11-5-2015 |

commit a7f01b16019980419a8b985eb4fe306fea6ade9a

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Nov 5 13:42:17 2015 +1030

Finished poster for print

Project Documentation/Poster.indd | Bin 4329472 -> 4329472 bytes

Project Documentation/SR FYP Poster 2015.pdf | Bin 0 -> 4435189 bytes

2 files changed, 0 insertions(+), 0 deletions(-)

commit f9756716067fa5b752ec27734f4d7d5bda890a75

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Nov 5 13:17:02 2015 +1030

Poster nearing completion

Project Documentation/Poster.indd | Bin 2502656 -> 4329472 bytes

1 file changed, 0 insertions(+), 0 deletions(-)

commit 6777f10f8da9f3998df464adb6958ca002d179fb

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Nov 5 04:24:35 2015 +1030

offline weighted merge change

.../processing test/offline\_shader/fragment.glsl | 2 +-

.../weighted\_merge\_shader/fragment.glsl | 4 +-

.../weighted\_merge\_shader.pde | 44 +++++++++++-----------

3 files changed, 26 insertions(+), 24 deletions(-)

commit da78d4b8b76a7bbcf70505e4ea0702a9bc2ddf7c

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Nov 5 04:13:22 2015 +1030

layout improvements, additional content

Project Documentation/Poster.indd | Bin 2424832 -> 2502656 bytes

Project Documentation/unisa logo.png | Bin 0 -> 31967 bytes

2 files changed, 0 insertions(+), 0 deletions(-)

commit 250128d05ee50b766e4fbd346202f0f5df9a9e3d

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Nov 5 03:57:45 2015 +1030

poster progress

Project Documentation/Pipeline Diagram.png | Bin 0 -> 129323 bytes

Project Documentation/Poster.indd | Bin 1064960 -> 2424832 bytes

src/Shaders/weighted sum Shadertoy mirror.txt | 100 ++++++++++++++++++++++++++

3 files changed, 100 insertions(+)

commit 40b0ce656c2aa6195878ed18971de1faf313a4fe

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Wed Nov 4 23:48:13 2015 +1030

poster and glslhacker test file

Project Documentation/Poster.indd | Bin 0 -> 1064960 bytes

src/testing/glsl hacker test/demo\_gles2.xml | 248 ++++++++++++++++++++++++++++

2 files changed, 248 insertions(+)

commit 1075f6e05e88ce9c5be821ebd5865f7c436e38f0

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Wed Nov 4 01:35:43 2015 +1030

light and dark video

src/testing/dark.mp4 | Bin 0 -> 8933712 bytes

src/testing/light.mp4 | Bin 0 -> 9369643 bytes

2 files changed, 0 insertions(+), 0 deletions(-)

commit dac91bd2ac03eec43b6c930a97e98b99eafef17c

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Tue Nov 3 18:16:06 2015 +1030

Offline test shader fixes

src/testing/processing test/offline\_shader/fragment.glsl | 2 +-

src/testing/processing test/offline\_shader/offline\_shader.pde | 4 ++--

2 files changed, 3 insertions(+), 3 deletions(-)

commit 7c6bfd3fe1f076241e12ea8e9c28d1a831e8f160

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 31 22:37:42 2015 +1030

Webcam input tests to processing

.../weighted\_merge\_shader.pde | 29 +++++++++++++++++++---

1 file changed, 26 insertions(+), 3 deletions(-)

commit f6a8bd860abe8cdaa6a8ab12440dc05c96934ea6

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 31 01:14:20 2015 +1030

weighted HDR processing project

.../processing test/offline\_shader/fragment.glsl | 2 +-

.../processing test/weighted\_merge\_shader/dark.JPG | Bin 0 -> 198523 bytes

.../weighted\_merge\_shader/fragment.glsl | 94 +++++++++++++++++++++

.../weighted\_merge\_shader/light.JPG | Bin 0 -> 240675 bytes

.../weighted\_merge\_shader/normal.JPG | Bin 0 -> 246209 bytes

.../weighted\_merge\_shader/vertex.glsl | 18 ++++

.../weighted\_merge\_shader.pde | 42 +++++++++

7 files changed, 155 insertions(+), 1 deletion(-)

commit fd2e58444b08b2352d21b92199ff8b9efc5fc80a

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 31 00:59:53 2015 +1030

Clipping detection shader ported to processing sketch

.../processing test/offline\_shader/fragment.glsl | 115 +++++++++++++++------

.../offline\_shader/offline\_shader.pde | 29 +++---

2 files changed, 98 insertions(+), 46 deletions(-)

commit 5b181d53294948092c9685b73e5ce30d0cd18b92

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 31 00:46:00 2015 +1030

processing renders shader with compatibility with shader toy uniforms

.../processing test/offline\_shader/dark.JPG | Bin 0 -> 198523 bytes

.../processing test/offline\_shader/fragment.glsl | 56 +++++++++++++++++++++

.../processing test/offline\_shader/light.JPG | Bin 0 -> 240675 bytes

.../processing test/offline\_shader/normal.JPG | Bin 0 -> 246209 bytes

.../offline\_shader/offline\_shader.pde | 56 +++++++++------------

.../processing test/offline\_shader/vertex.glsl | 18 +++++++

6 files changed, 99 insertions(+), 31 deletions(-)

commit f7230545e38ba203218054eac795a8ba2f7acfe2

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 31 00:04:08 2015 +1030

processing fragment shader 2d

.../offline\_shader/offline\_shader.pde | 37 ++++++++++++++++------

1 file changed, 28 insertions(+), 9 deletions(-)

commit ffc65e726c2ec18c842bff05c0195080002bd67a

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Fri Oct 30 23:24:51 2015 +1030

processing import and panellise still images

.../offline\_shader/offline\_shader.pde | 28 ++++++++++++++++++++++

1 file changed, 28 insertions(+)

commit 70ced9a91ae19e369dc20ba8926b404e2f7fe3ba

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Fri Oct 30 23:05:38 2015 +1030

Runtime checks for platform openGL support, additional openCV imports

.../oCV tests/CMakeFiles/cHDR.dir/CXX.includecache | 50 ++++++++++++++++++++--

.../oCV tests/CMakeFiles/cHDR.dir/depend.internal | 5 +++

.../oCV tests/CMakeFiles/cHDR.dir/depend.make | 5 +++

src/testing/oCV tests/cHDR.cpp | 32 ++++++++++++--

4 files changed, 85 insertions(+), 7 deletions(-)

commit 90e0f4962e407ba267619061a50570e41050b186

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Fri Oct 30 21:35:39 2015 +1030

Brought shader work from SToy to this repo for safe keeping

Restructured some documentation

Project Documentation/odroid deets.md | 1 +

odroid deets.md | 1 -

sandboxShader.frag | 118 ----------------------------

src/Shaders/RGBtoHSV\_function | 23 ++++++

src/Shaders/changeSaturation\_function | 5 ++

src/Shaders/chromakey\_function | 9 +++

src/Shaders/hdr weighted sum | 62 +++++++++++++++

src/Shaders/image clipping replacement test | 91 +++++++++++++++++++++

src/Shaders/lumakey\_function | 31 ++++++++

9 files changed, 222 insertions(+), 119 deletions(-)

commit 7f2d8b82a77124f5052621fd163f3f5450003113

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Wed Oct 28 14:23:23 2015 +1030

bracketed images input to oCV test instead of webcams...

.../oCV tests/CMakeFiles/cHDR.dir/cHDR.cpp.o | Bin 23596 -> 26324 bytes

src/testing/oCV tests/cHDR | Bin 48496 -> 48856 bytes

src/testing/oCV tests/cHDR.cpp | 94 ++++++++++-----------

src/testing/oCV tests/dark.JPG | Bin 0 -> 198523 bytes

src/testing/oCV tests/light.JPG | Bin 0 -> 240675 bytes

src/testing/oCV tests/normal.JPG | Bin 0 -> 246209 bytes

6 files changed, 46 insertions(+), 48 deletions(-)

commit 969219026c738bb4dec33dd1ee1b6ad2b44588ff

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 24 18:42:40 2015 +1030

processing test,

didn't work on Mac Pro...

.../dual\_camera\_test/dual\_camera\_test.pde | 47 ++++++++++++++++++++++

1 file changed, 47 insertions(+)

commit 59cffd06d2e37b2bbb7ad7611f05613c1b0124fd

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sat Oct 24 01:06:28 2015 +1030

more stuff I forgot

src/testing/oCV tests/CMakeFiles/Makefile.cmake | 65 ---------------

.../oCV tests/CMakeFiles/cHDR.dir/cHDR.cpp.o | Bin 25672 -> 23596 bytes

src/testing/oCV tests/cHDR | Bin 48568 -> 48496 bytes

src/testing/oCV tests/cHDR.cpp | 89 +++++++++++----------

4 files changed, 47 insertions(+), 107 deletions(-)

commit 799e0eb552ad0d0a42e68f80dab475c8da00e667

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Fri Oct 23 18:15:53 2015 +1030

Count cameras before start, code formatting fixes

src/testing/oCV tests/cHDR.cpp | 88 ++++++++++++++++++++----------------------

1 file changed, 41 insertions(+), 47 deletions(-)

commit 7677694fd7cb576e0926b8f3ea35926aa2f671cd

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Fri Oct 23 18:14:41 2015 +1030

Frame layout, 3x2 grid of images with margin for easily explained output...

Text overplayed on frames to label them

Uses same camera feed for all blocks

.../oCV tests/CMakeFiles/cHDR.dir/cHDR.cpp.o | Bin 14720 -> 25672 bytes

src/testing/oCV tests/cHDR | Bin 42236 -> 48568 bytes

src/testing/oCV tests/cHDR.cpp | 94 ++++++++++++++++-----

3 files changed, 71 insertions(+), 23 deletions(-)

commit e25f4748acac8d00fc5db0d18522e560760d964d

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Oct 22 22:40:03 2015 +1030

opencv webcam tests

src/testing/gpucode ahmet akyuz/Makefile | 5 -

src/testing/gpucode ahmet akyuz/README | 23 -

src/testing/gpucode ahmet akyuz/createHDRGPU.cpp | 145 -----

src/testing/gpucode ahmet akyuz/fragHDRCreate.glsl | 64 --

src/testing/gpucode ahmet akyuz/fragShowHDR.glsl | 15 -

src/testing/gpucode ahmet akyuz/fragTonemap.glsl | 115 ----

.../gpucode ahmet akyuz/fragTonemapGlobal.glsl | 99 ---

src/testing/gpucode ahmet akyuz/ogl.cpp | 662 ---------------------

src/testing/gpucode ahmet akyuz/ogl.h | 18 -

src/testing/gpucode ahmet akyuz/rgbe.c | 413 -------------

src/testing/gpucode ahmet akyuz/rgbe.h | 53 --

src/testing/gpucode ahmet akyuz/utils.cpp | 288 ---------

src/testing/gpucode ahmet akyuz/utils.h | 109 ----

src/testing/gpucode ahmet akyuz/vertHDRCreate.glsl | 17 -

src/testing/gpucode ahmet akyuz/vertShowHDR.glsl | 17 -

src/testing/gpucode ahmet akyuz/vertTonemap.glsl | 17 -

src/testing/oCV tests/CMakeCache.txt | 353 +++++++++++

.../CMakeFiles/3.4.0-rc2/CMakeCCompiler.cmake | 67 +++

.../CMakeFiles/3.4.0-rc2/CMakeCXXCompiler.cmake | 68 +++

.../3.4.0-rc2/CMakeDetermineCompilerABI\_C.bin | Bin 0 -> 4304 bytes

.../3.4.0-rc2/CMakeDetermineCompilerABI\_CXX.bin | Bin 0 -> 4288 bytes

.../CMakeFiles/3.4.0-rc2/CMakeSystem.cmake | 15 +

.../3.4.0-rc2/CompilerIdC/CMakeCCompilerId.c | 521 ++++++++++++++++

.../CMakeFiles/3.4.0-rc2/CompilerIdC/a.out | Bin 0 -> 8616 bytes

.../3.4.0-rc2/CompilerIdCXX/CMakeCXXCompilerId.cpp | 510 ++++++++++++++++

.../CMakeFiles/3.4.0-rc2/CompilerIdCXX/a.out | Bin 0 -> 8600 bytes

.../CMakeFiles/CMakeDirectoryInformation.cmake | 16 +

src/testing/oCV tests/CMakeFiles/CMakeOutput.log | 453 ++++++++++++++

src/testing/oCV tests/CMakeFiles/Makefile.cmake | 117 ++++

src/testing/oCV tests/CMakeFiles/Makefile2 | 108 ++++

.../oCV tests/CMakeFiles/TargetDirectories.txt | 1 +

.../oCV tests/CMakeFiles/cHDR.dir/CXX.includecache | 464 +++++++++++++++

.../oCV tests/CMakeFiles/cHDR.dir/DependInfo.cmake | 22 +

.../oCV tests/CMakeFiles/cHDR.dir/build.make | 141 +++++

.../oCV tests/CMakeFiles/cHDR.dir/cHDR.cpp.o | Bin 0 -> 14720 bytes

.../CMakeFiles/cHDR.dir/cmake\_clean.cmake | 10 +

.../oCV tests/CMakeFiles/cHDR.dir/depend.internal | 57 ++

.../oCV tests/CMakeFiles/cHDR.dir/depend.make | 57 ++

.../oCV tests/CMakeFiles/cHDR.dir/flags.make | 10 +

src/testing/oCV tests/CMakeFiles/cHDR.dir/link.txt | 1 +

.../oCV tests/CMakeFiles/cHDR.dir/progress.make | 3 +

src/testing/oCV tests/CMakeFiles/cmake.check\_cache | 1 +

src/testing/oCV tests/CMakeFiles/feature\_tests.bin | Bin 0 -> 8376 bytes

src/testing/oCV tests/CMakeFiles/feature\_tests.c | 34 ++

src/testing/oCV tests/CMakeFiles/feature\_tests.cxx | 405 +++++++++++++

src/testing/oCV tests/CMakeFiles/progress.marks | 1 +

src/testing/oCV tests/CMakeLists.txt | 6 +

src/testing/oCV tests/Makefile | 178 ++++++

src/testing/oCV tests/cHDR | Bin 0 -> 42236 bytes

src/testing/oCV tests/cHDR.cpp | 77 +++

src/testing/oCV tests/cmake\_install.cmake | 39 ++

51 files changed, 3735 insertions(+), 2060 deletions(-)

commit a0ee5cada761bf7f179e1fe4d336007c7575caab

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Oct 22 12:27:56 2015 +1030

pushing gpucode test for build on xu4

src/readme.txt | 4 +-

src/testing/gpucode ahmet akyuz/Makefile | 5 +

src/testing/gpucode ahmet akyuz/README | 23 +

src/testing/gpucode ahmet akyuz/createHDRGPU.cpp | 145 +++++

src/testing/gpucode ahmet akyuz/fragHDRCreate.glsl | 64 ++

src/testing/gpucode ahmet akyuz/fragShowHDR.glsl | 15 +

src/testing/gpucode ahmet akyuz/fragTonemap.glsl | 115 ++++

.../gpucode ahmet akyuz/fragTonemapGlobal.glsl | 99 +++

src/testing/gpucode ahmet akyuz/ogl.cpp | 662 +++++++++++++++++++++

src/testing/gpucode ahmet akyuz/ogl.h | 18 +

src/testing/gpucode ahmet akyuz/rgbe.c | 413 +++++++++++++

src/testing/gpucode ahmet akyuz/rgbe.h | 53 ++

src/testing/gpucode ahmet akyuz/utils.cpp | 288 +++++++++

src/testing/gpucode ahmet akyuz/utils.h | 109 ++++

src/testing/gpucode ahmet akyuz/vertHDRCreate.glsl | 17 +

src/testing/gpucode ahmet akyuz/vertShowHDR.glsl | 17 +

src/testing/gpucode ahmet akyuz/vertTonemap.glsl | 17 +

17 files changed, 2063 insertions(+), 1 deletion(-)

commit 30fbed43acd395406ebd2e52cb11c9ab86fdf80a

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Oct 22 11:59:33 2015 +1030

Hardware Received, models and eth0 MAC

Enclosure/CAD/Odroid 720p webcam pcb.SLDPRT | Bin 0 -> 174089 bytes

Enclosure/CAD/Odroid Xu4.stp | 4854 +++++++++++++++++++++++++++

odroid deets.md | 1 +

3 files changed, 4855 insertions(+)

commit fde0322f834c3abfac4f810656b0a1c43b9e36f9

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Oct 8 16:20:56 2015 +1030

added purchase order

Presentation.pptx | Bin 2164582 -> 0 bytes

Project Documentation/Presentation.pptx | Bin 0 -> 2164582 bytes

.../ScottR HDR FYP Odroid Order rev2.docx | Bin 0 -> 58205 bytes

3 files changed, 0 insertions(+), 0 deletions(-)

commit c89621bc73f6cbcdd39144cbb45c9081788bc46c

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Sun Oct 4 11:22:36 2015 +0000

Started source stuff on odroid

src/readme.txt | 1 +

1 file changed, 1 insertion(+)

commit 1ca791d8704d4952e665588e5f3ef28a1a72bf6a

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Thu Oct 1 22:30:36 2015 +0930

Added presentation and some images

Presentation.pptx | Bin 0 -> 2164582 bytes

Progress Pics/16bit gamma.png | Bin 0 -> 10078 bytes

Progress Pics/16bit linear.png | Bin 0 -> 9847 bytes

Progress Pics/24bit gamma.png | Bin 0 -> 10048 bytes

Progress Pics/24bit linear.png | Bin 0 -> 9810 bytes

Progress Pics/Video shadow overlay.png | Bin 0 -> 221822 bytes

Progress Pics/video highlight overlay.png | Bin 0 -> 121568 bytes

7 files changed, 0 insertions(+), 0 deletions(-)

commit cde0d95cacd1b75b525361903d7811d4ba74708c

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Mon Aug 31 17:19:24 2015 +0930

Added copy of shader toy test piece.

GLSL fragment shader started

Luma clipping detection and culling with adjustable thresholding and bias.

Progress Pics/Luma Thresholding GLSL.png | Bin 0 -> 409539 bytes

Progress Pics/LumaThresh exclude data.png | Bin 0 -> 437620 bytes

Progress Pics/lumaThresh exclude debug.png | Bin 0 -> 437135 bytes

sandboxShader.frag | 118 +++++++++++++++++++++++++++++

4 files changed, 118 insertions(+)

commit 24f6a3b143ea9f5fb7e7394ecdb9de0fab875cd7

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Mon Aug 31 14:26:20 2015 +0930

Initial commit

README.md | 7 +++++++

1 file changed, 7 insertions(+)

commit 020320d60f6a5e13446a99dc83a6e34fc048728e

Author: Scott Rapson <scottapotamas@gmail.com>

Date: Mon Aug 31 14:21:50 2015 +0930

Initial commit

README.md | 2 ++

1 file changed, 2 insertions(+)