REAL-TIME AUDIOVISUALS

DMA Summer Institute 2011
June 20 to 24
June 27 to July 1
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COURSE DESCRIPTION

In this course students will engage with a set of software and hardware tools and techniques to produce and combine audiovisual content in real-time, creating works of live cinema, live media, and vjing. The emphasis will be on the use of real-time technologies instead of conventional linear editing tools. These technologies are more and more deployed in the art and entertainment industries and in concerts, live shows, theatre productions, media art festivals and urban art events.

Students will learn to shoot and produce original content, mix and edit in real time, and design generative applications reacting to sound and various control interfaces. Professional multi-platform software such as Resolume Avenue, Module8 and Cycling74 Max/Msp/Jitter will be introduced, with the context of some of the most influential artists working across the disciplines of live media performance.

For this course, emphasis will be given to the relationship of real-time audiovisuals to architecture.

The course will culminate with a collaborative project where a portion of the Broad Art Center building facade is entrusted to each student, with the prompt to use video-mapping techniques to engage the existent architecture with personal audiovisual designs. The students will use the building’s architecture as a blank canvas for their unique live-media creations.
1 WEEK SCHEDULE

**Day 1**
- course presentation
  - introduction: peculiarities of real-time and linear editing: loop, cut, sampling and looping: add, mix and mash-up.
  - screening and overview of artists’ works and performances
  - workshop: HD and SLR cameras: importing, compressing and saving audiovisual materials with Final Cut Pro.

**Day 2**
- screening and overview of artists’ works and performances
- analog and digital audiovisual mixing workshop: Panasonic MX50, Resolume Venue, Modul8, midi controllers, audio in, live-video feed
- first assignment: produce a 2 minute set with given audio track using Resolume Venue or Modul8
- hands on, open-table workshop
- first assignment due

**Day 3**
- introduction to video-mapping techniques
  - screening and overview of artists’ works and performances
  - second assignment: choose a portion of the facade and sketch, design and produce an audiovisual set to map on the architecture.
  - hands on, open-table workshop

**Day 4**
- second assignment due
- setting up of video-projection system, pre-production
- uploading contents, rehearsal
- FINAL SHOW: from 7pm on, video-projections of students contents on DMA building facade

**Day 5**
- wrap-up, documentation editing and presentation
ADVANCED WEEK SCHEDULE

Day 1
- advanced course presentation
- aesthetic and programmatic differences between live-cinema and vjing: role of spectator, specificity of context
- quick overview and screening of experimental visual music in XXI sec.

Day 2
- screening and overview of artists’ works and performances
- max/msp/jitter workshop I: modules-oriented paradigm, fundamentals, video loop, video feedbacks, MIDI
- first assignment: design a multichannel video mixer with MIDI input
- hands on, open-table workshop

Day 3
- first assignment due
- overview on real time 3D and generative design
- screening and overview of artists’ works and performances
- max/msp/Jitter workshop II: rendering 3d matrices, 3d and video, primitives, textures, audio in, basic FFT.
- introduction to video-mapping techniques and second assignment: choose a portion of the facade and sketch, design and produce an audiovisual set to map on the architecture.

Day 4
- second assignment due
- setting up of video-projection system, pre-production
- uploading contents, rehearsal
- FINAL SHOW: from 7pm on, video-projections of students contents on DMA building facade

Day 5
- wrap-up, documentation editing and presentation
ARTIST REFERENCES

Hans Richter
Oskar Fischinger
Len Lye
John and James Whitney
Iannis Xenakis
Leo Villareal
Julien Maire
Bob Ostertag and Pierre Hébert

Coldcut – www.coldcut.net
Hexstatic – www.hexstatic.tv
Addictive TV – www.addictive.tv
Exceeda – www.exceeda.com
vj moto – www.vjtomichi.com
Eboman – www.eboman.info
Solu – www.solu.org
Scanner – www.scannerdot.com
D-Fuse – www.dfuse.com
Spark – www.sparkav.co.uk
C-trl labs – www.c-trl.com
Vj Culture – www.vjculture.com
Samurai – www.samurai-web.com

Visomat - www.visomat.com
Telcosystems – www.telcosystems.net
Rioichi Kurokawa - homepage.mac.com/etrerk/
Scott Pagano – www.neither-field.com
Semiconductor – www.semiconductorfilms.com
Ryoki Ikeda – www.ryokijikeda.com
Otolab – www.otolab.net
Sue Constable – www.sue-c.net
Dienstelle – www.dienstelle.com
Masato Tsutsui – www.adst.jp
The Light Surgeons – www.thelightsurgeons.co.uk
Andrew Benson – www.pixlpa.com
Purform - www.ybx.ca
Fixer – www.fixer.net
Pfadfinderi - www.pfadfinderi.com

Anti-vj – www.anti-vj.com
UVA - www.uva.co.uk
Themacula – www.themacula.com
Vj Pixylight – www.pixylight.com
Nokami – www.nokami.com
Phormazero – www.phormazero.com