

Experimental Film with Machine Learning, Python, and p5.js

Taught by [Derrick Schultz](#)

Week 1: Intro to experimental film and Google Colab

Class Materials

- [Slides](#)
- [Recording](#)

Class Notes and Links

- [Basic Colab Demo](#)
- For the Colab curious, here is [a whole class I previously taught on using Colab](#) (not required for this course!)

Section 1: Abstracted Bodies

Films to watch

- *Anima*, Steve Beck (1973, 9min)
- *Elsewhere*, Martin Arnold (2016, 3min)
[Warning: some flickering]
- *Introspection*, Sara Kathryn Arledge (1946, 6.5min)
- *Private Imaginings and Narrative Facts*, Edward Owens (1967-1970)
- *Geography of the Body*, Willard Maas (1943, 7min)
[Warning: nudity]
- *Mutiny*, Abigail Child (1983, 10min)
- *Fuses*, Carolee Schneemann (1964, 29min)
[Warning: Sexually Explicit, some flickering]

- *Breakaway*, Bruce Conner (1966, 5min)
[Warning: nudity, some flickering]
- *9 Variations on a Dance Theme*, Hillary Harris (1966-1967, 13min)
- [body sketches](#), Zach Lieberman (2019, 30s)
- [Looking 4 U](#), Derrick Schultz (2021, 4min)
[Warning: strobing and flickering]

Additional Submissions

- [Shape Shift \(studio demo\)](#), Scott Stark (2004, 3min)
[Warning: flickering] (Thanks Douglas!)
- [Jekyll and Hyde](#), Paul Bush (2001, 5min)
[Warning: mild flickering]
- [Apex](#), Arthur Jafa (2013)
- [Love is the Message, the Message is Death](#), Arthur Jafa (2019)
- [Issey Miyake video](#) (animation by Euphrates, 2007?)

Week 2: Abstracted Bodies

Class Materials

- [Recording](#)
- [Colab notebook](#)
- [P5.js file](#) (keypoint dots)
- [P5 project download](#) (keypoint dots)

Class Notes and Links

- [Coding Train p5 tutorials](#)
- [Info about the 25B model](#)

Week 3: Abstracted Bodies

Class Materials

- [OpenPose 25B p5.js sketch](#)
- [OpenPose 25B skeleton files](#)

- [BodyPix notebook](#)
- [Recording](#)

Class Notes and Links

- [FFMPEG course on YouTube](#)
- [OpenCV Workshop](#)

Section 2: Visual Music

Films to watch

- *Tarantella*, Mary Ellen Bute (1940, 5min)
- *Begone Dull Care*, Norman McLaren (1949, 8min)
- [Soundtrack](#), Barry Spinello (1969, 10min, 2min excerpt)
[Warning: flickering]
- *Permutations*, John Whitney Sr (1968, 7min)
- *Eye Music in Red Major*, Marie Menken (1961, 5.5min)
[Warning: flickering]
- [PLECO](#), Sarah Groff Hennigh-Palermo with Conditional Recs (2021, variable)
- *Something Between Us*, Jodie Mack (2015, 9.5min)
- *The Dante Quartet*, Stan Brakhage (1987, 6min)
[Warning: flickering]
- [Simple Harmonic Motion #5R](#), Memo Akten (2011-, 3min)
- *Free Radicals*, Len Lye (1958, 4min)

Week 4: Visual Music

Class Materials

- [Tutorial Recording](#)
- [Viddim Notebook](#)

Class Notes and Links

- [Doodlin \(Len Lye Documentary\)](#)
- [Normal McLaren Optical Track](#)
- [Wekinator](#)

- [SpecVQGAN](#)
- [BPM vs framerate chart](#)

Week 5: Visual Music

Class Materials

- [Tutorial Recording](#)
- [Lucid Sonic Dreams Notebook](#)
- [Handpose Sound Generator in p5.js](#)

Class Notes and Links

- [An alternate audioreactive notebook](#) (more control but higher barrier to entry)
- [Online audio trimming tool](#)
- [Demucs documentation](#)
- [Awesome Pre-trained StyleGAN2 repo](#)
- [ML5.js reference site](#)

Section 3: Cine-Poetry

Films to watch

- *Meshes of the Afternoon*, Maya Deren (1943, 5min)
- *Un chien andalou*, Luis Buñuel & Salvador Dalí (1929, 16min)
[Warning: a particular scene with a knife and an eye, nudity]
- *Bells of Atlantis*, Ian Hugo (1952, 10min)
- [Starfish Aorta Colossus](#), Lynne Sachs (2015, 5min)
- *Dear Janice*, Adam Beckett (1972, 16min)
- *The Poem*, Barbara Sykes (1975, 9min)
- *Gently Down the Stream*, Su Friedrich (1981, 12min)
- *Dionysus*, Charles Boultenhouse (1963, 26min)
- *Bouquet 11 & Bouquet 14*, Rose Lowder (2011, 1min each)
[Warning: flickering]
- [Colour Poems](#), Margaret Tait (1974, 11min)
[Warning: flickering]

- *Arabesque for Kenneth Anger*, Marie Menken (1961, 5min)
[Warning: flickering]

Week 6: Cine-Poetry

Class Materials

- [Discussion](#)
- [Tutorial Recording](#)
- [GPT-J Notebook](#) (don't use unless you like pain)
- [GPT-J Website](#) (use this instead)
- [Gwern article with GPT prompt examples](#)

Class Notes and Links

- [GPT-3 sign up page](#)

Week 7: Cine-Poetry

Class Materials

- [Part 1 Tutorial Recording](#) (Aphantasia)
- [Part 1 Notebook](#) (Aphantasia)

Class Notes and Links

- [Aphantasia Github Repo](#)
- [Image Prompt Examples](#)
- [Selfie Song Examples](#)
- [Vadim Epstein's Patreon](#)