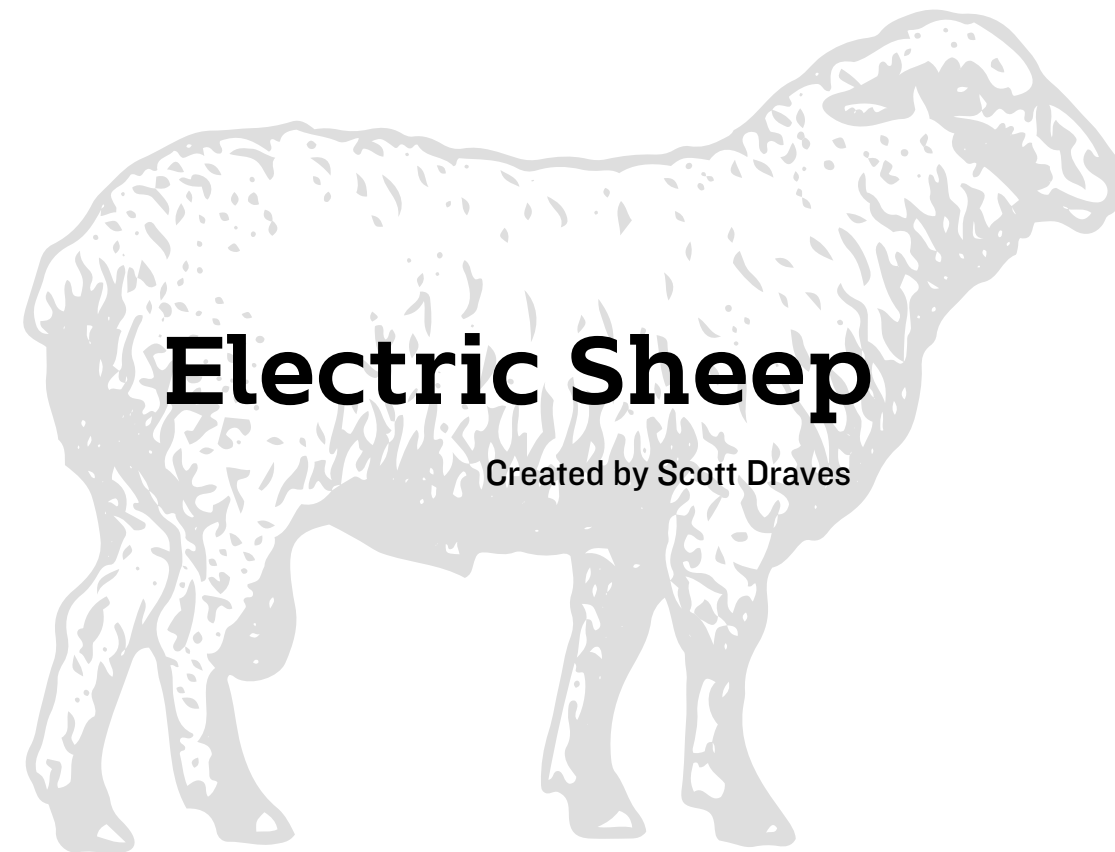


Ryan Jones
Assignment I



Overview

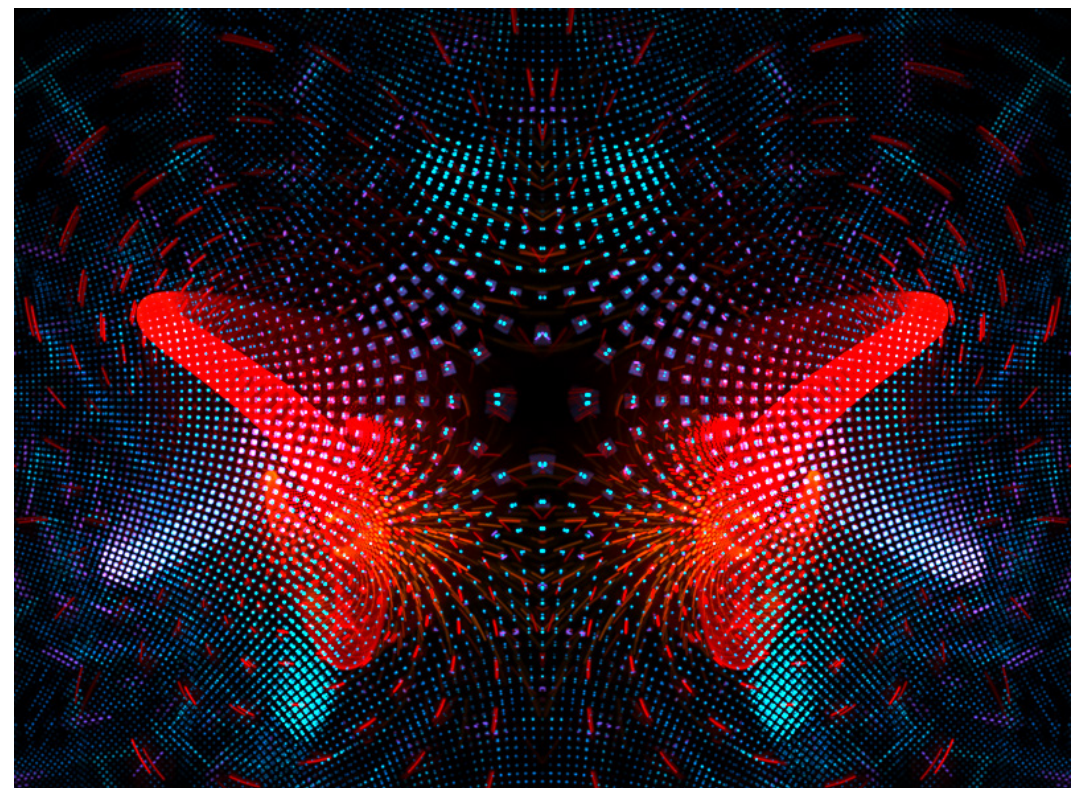
Created in 1999 by Scott Draves, the Electric Sheep is a form of artificial life, which is to say it is software that recreates the biological phenomena of evolution and reproduction through mathematics. The system is made up of man and machine, with 500,000 active participant computers and people all over the Internet per month.

It is a distributed system, with all participating computers working together to form a supercomputer that renders animations, called “sheep”, that everyone sees. As the screensaver entertains the user, their computer is also used for rendering commercial projects, sales of which keep the servers and developers running. The human participants guide the survival of the fittest by voting for their favorite animations in the flock.

Each participating computer follows mathematical instructions, Draves’ Flame algorithm, to render its own piece of the larger work. The images are sent back to a central server which compresses them into animations which are sent back out to the viewers. The electricsheep.org website shows the family tree for each sheep, including its parents and offspring, and viewers can track family resemblance. The artist’s Clade series shows a selection of family members in high resolution.

Like Draves’ other software art, the Electric Sheep code is open source, which has allowed it to benefit from code contributions from many enthusiastic programmers. Now Draves serves as head Shepherd on a project with many participants.

The most popular sheep from the current flock can be viewed on the live server, or you can browse the archive.



User Study



User Downloads and installs Electric Sheep

Passive members

Active members



Passive members can view the screen saver when their computer



Active members can download the parameters of existing sheep and tweak them, or sheep can be mated together automatically by the server or manually by server admins (nicknamed shepherds).



While the screensaver is running, Users can use the up (or down) arrow key to vote for the sheep you like (or not), and so influence the evolution of the flock.



Up votes allow the animations to continue and cross with others



Down votes will kill the sheep