

CENTER FOR MACHINE ARTS



JUNE 17TH 5-8PM

**KRISTA JONES - LEO MCELROY - STELLA MARRS - AL LARSEN - JENN KARSON
MICHAEL GAYK - JASON STILLERMAN - DEVIN COOPER - BRE PETTIS**

189 N. WATER ST. PEEKSKILL NEW YORK

Center For Machine Arts was born out of a desire to return to a state of creativity that was discovered at Haystack Mountain School of Craft. We've initiated a community that brings artists together to make art with machines. We have gathered friends to make art all week. There isn't a plan, something will happen. We are having a show that people will come to.

This is the launch of The Center Of Machine Arts and the support has been fantastic. We are exploring the pathway to becoming a non-profit and figuring out how we keep the momentum to gather and empower artists that use machines to bring their art from the digital into the world of the physical.

We focused on plotter work and that forces the work to be flat and linear and made of lines. Lines happen going from point to point and so the work is made up of points and lines. The work was designed in many different ways but almost always had to travel through a process of becoming an SVG file which stands for Scalable Vector Graphics. I love this SVG idea that these images aren't pixels, they are points with lines between them. *Scalable art.*

A lot of folks think that machines and artificial intelligence take the human out of the picture, but the reality couldn't be more opposed to that. The machines don't cooperate, documentation on the internet isn't always accurate, and pens and ink and motors don't always behave as expected. In some ways the machines bring humanity to our digital work by forcing us to accept their mistakes and flaws and mis-steps. Sometimes we even encourage these flaws that manifest as the work travels from the digital to the physical. The work is a conversation between humans and machines, we ask questions, we play, we sometimes argue.

We've been eating really well thanks to the abundance of good restaurants in the area and spent many evenings talking over food about the state of the world, animals, ecology, social fabric, political and personal. This week we saw important legislation at the Supreme Court and we saw the word *diversity* banned from the school system in Texas. A week early, we had to consider rescheduling the June cohort because of New York's apocalyptic orange skies and hazardous air quality - the result of forest fires in Canada. We've been talking about these things as we make art. We are concerned about our shared futures.

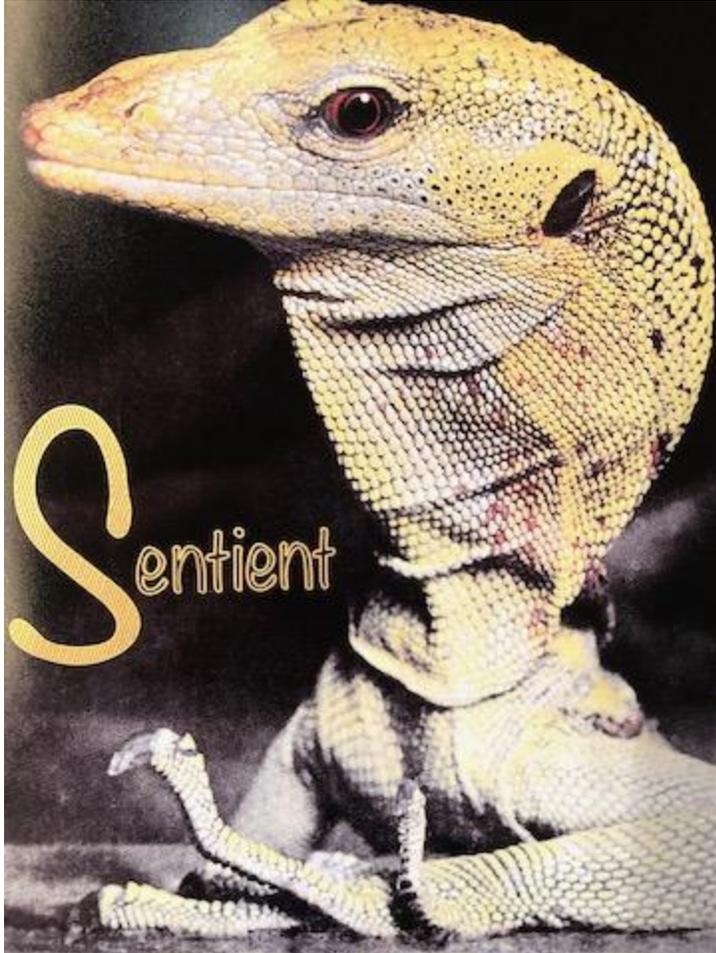
We are in Peekskill New York and celebrated Juneteenth and there was a parade today. The city council waved, the superintendent of the school system said hello, the marching bands banged out powerful rhythms. We aren't anonymous, we are grounded in community. We are open to transformation. Welcoming is a shared value we have.

We welcome you into the conversation we have started with this work. The artists are in the room. We hope you take photos and tell us what you think and which images resonate. If making art with machines is something that you want to do or see more of, we'll have a sheet where you can sign up for our mailing list. We want to expand our reach and welcome others to explore this frontier of machine arts.



Bre Pettis and Jenn Karson

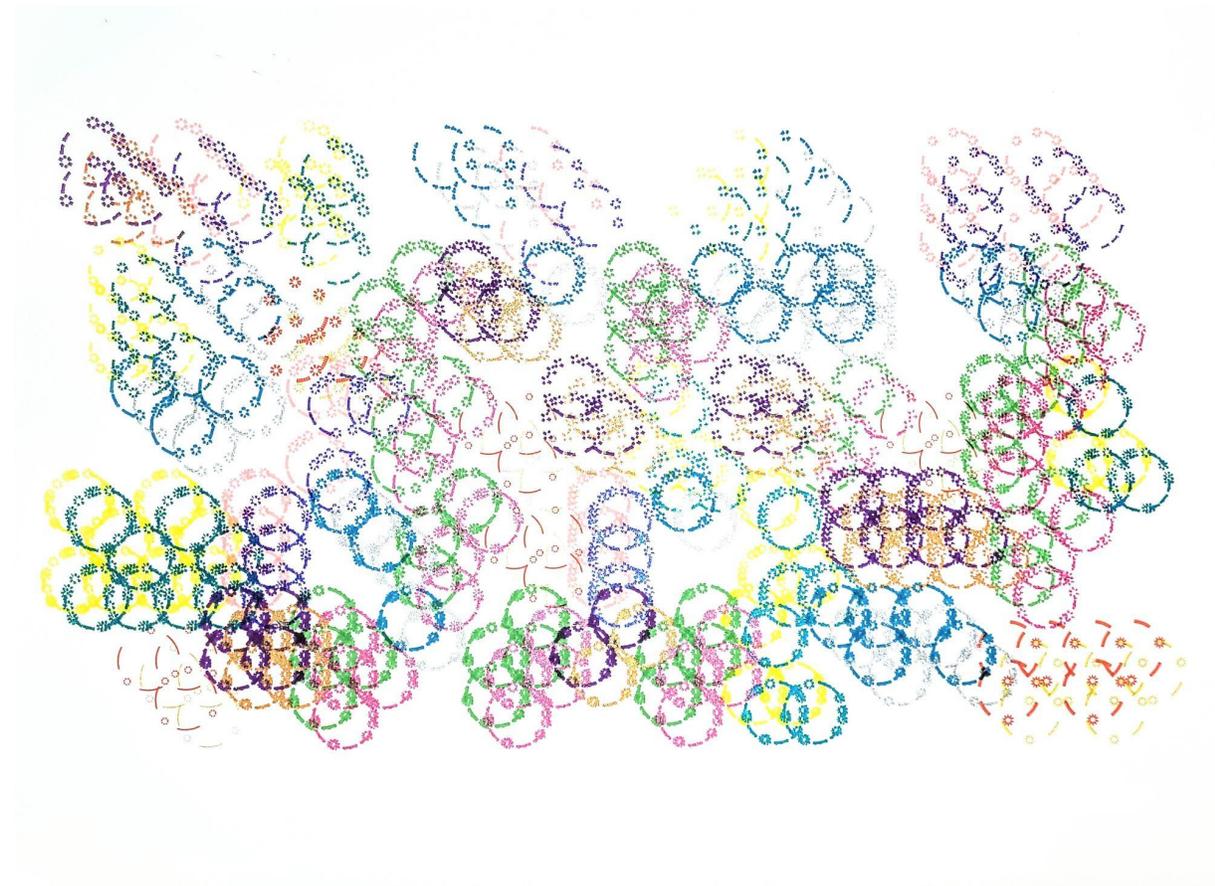
Stella Marrs
Burlington, Vermont



Plotter Poster Series
13"X 19" Photo Luster Paper

My work combines images and text as a way for me to meditate and process the world. I currently have been invested in thinking and researching animals in relation to environmental devastation. The work is a way to be in conversation with myself and others on this issue. I will be continuing to develop this current line of images as activist work. I was interested in working at the Center for Machine Arts to experience new tools and techniques that could introduce me to alternative processes to make public interventions. Not to mention the joy of hanging with a gang of amazing artists working their pants off.

Krista Jones
Essex, Vermont



All Ways #4

When we talk about love, we often think of grand gestures, but it is the small daily actions, the little details, that form the basis of all our relationships. And we communicate our feelings not just with our words, but with our touch, our laughs, our tears, our time, our attention...I wanted to capture this sense of layering. How the broad strokes that define our relationships consist of these varied expressions across forms and timeframes. I'm also fascinated by puzzles, codes, and ciphers. Tackling these kinds of challenges as a team is a fantastic way to build communication skills and collaborative approaches to problem solving. As escape room enthusiasts, it is something my partner and I certainly relish in our own lives! The "All Ways" series brings together these facets into a visual interpretation of a short love poem. The base component is written English words themselves, but they are formed into patterns of morse code (dots and dashes) and then into Braille (a 2x3 grid of dots). Numbers 1-3 in the series show the building blocks, from a single unit to the full poem. But here, in #4, we see the more colorful and chaotic final version – reflecting yet another level of layering and embracing the inevitably messy-at-time nature of our partnerships – that are beautiful nonetheless.

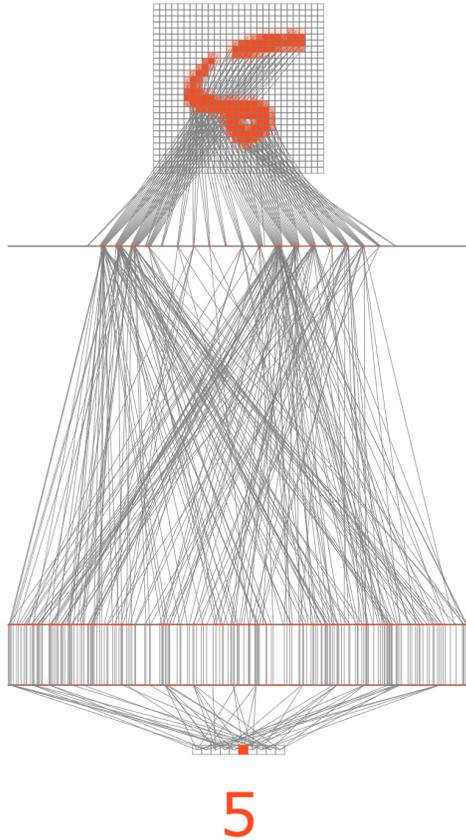
Leo McElroy
Cambridge, MA



Tidal Flat #1

This piece was generated entirely with code, then plotted onto paper with an HP7550A. Throughout the Center for Machine Arts inaugural residency I investigated noise in nature through waves, leaves, and ultimately the Tidal Flats Series. I wanted the challenge of making something figurative with intent while also leveraging the computational abilities of the computer for intricate pattern making. The vector formats which accommodate pen plotters made me want to use sweeping lines and to incorporate flow fields into the work. Tidal Flats makes use of Perlin noise, Poisson disk sampling, and Logo language style Turtle art. Tidal Flats is also a sort of collage; drawing inspiration and code snippets from Gabor Ugray and Reinder Nijhoff.

Jason Stillerman
Putney, VT



Inside the Box

Machine learning is a technique to program computers by example instead of with code. This has unlocked a whole class of previously unsolvable problems, but comes with a caveat: the code produced by this technique is not human readable. I am captivated by the concept that we can achieve incredible results with this technique but we have to then treat these programs like magical black boxes that cannot be understood. When you crack open the box, it is made up of nothing more than additions and multiplications and I wanted to capture that with this piece. You can see the uninterpretable computation that the computer is doing as the data flows from the hand written digit, through the grey lines down the page, firing the artificial neurons, and eventually deciding it sees a five.

Jenn Karson
Colchester, VT



Machining the Natural World: study #3
Aluminum, machining dye
Two pieces, 4" x 4"

At the center of my current work is a collection of 5000 damaged oak and maple leaves I collected during the 2021 and 2022 *Lymantria dispar* (spongy moth) outbreaks in Colchester, Vermont. Provoked by drought and climate change, the caterpillar outbreaks defoliated oak and maple trees in the early spring, killing beloved neighborhood trees. My work with the Center for Machine Arts June 2023 cohort explores the tension between the natural world and technological advancement by asking *Can Machines repair damaged leaves? Can technological advancements solve the environmental crisis on a local level?* Engravings made on the Bantam Tools desktop CNC contrast the formal qualities of oak and maple leaves with marks made by machines, juxtaposing organic leaf patterns and machine tooling textures. This work reveals the beauty of machine and plant efficiencies, their shared seductive qualities, and the inherent conflict between them.

Bre Pettis
Peekskill, New York



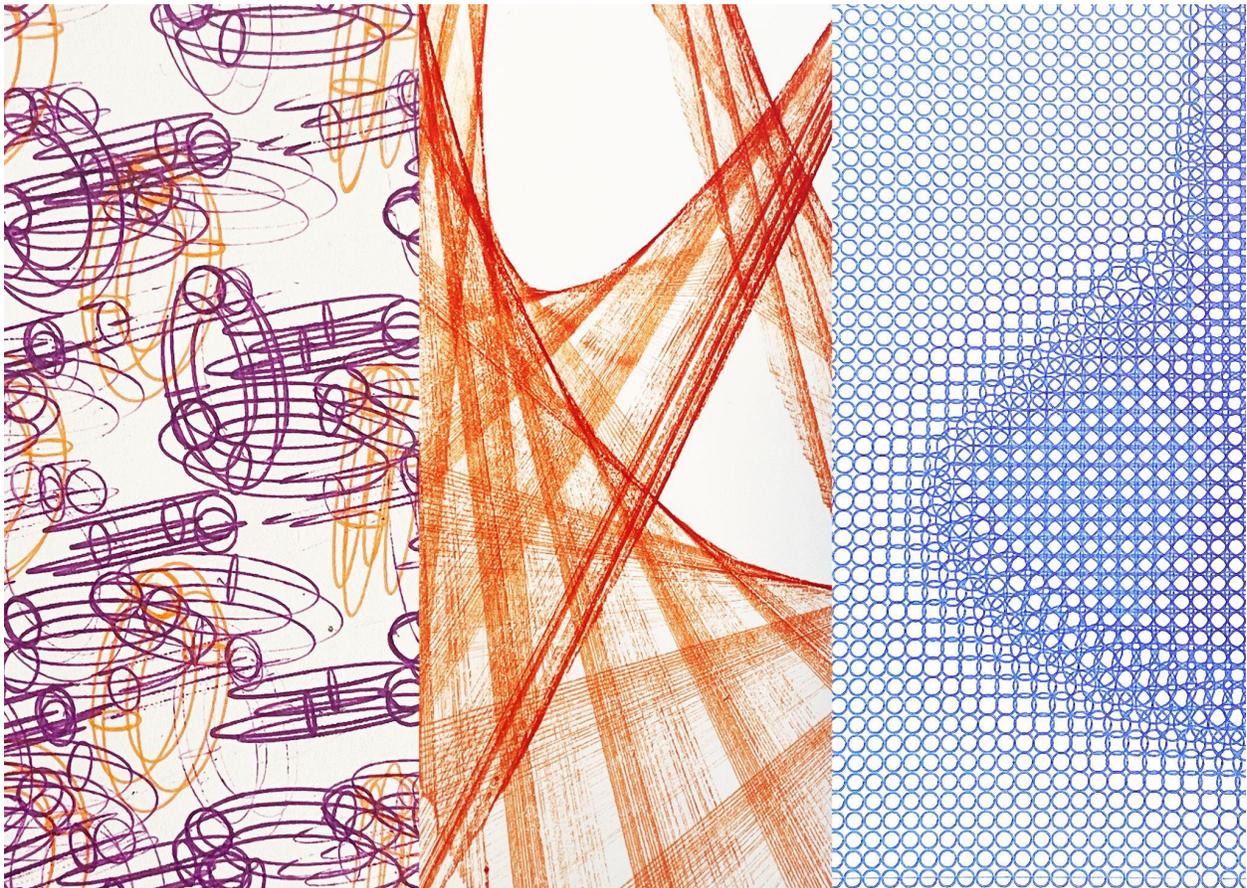
Forklifting the Moon

In 2002 I drew heavy machinery using the blind contour technique. This resulted in a really data heavy line quality. 21 years later, I've pulled them out of the archive, scanned them, trained an AI on them to make new spaceships using only my drawings as reference data. The AI fails and because all the reference material has wheels.

Things I think will work don't work, reference material on the internet isn't accurate. This try, try again is in this work as well and a big part of my life story of trial and error.

The paint pens ran out and were replaced. A color didn't have the effect I expected and so I did more over it and this technique of layering colors next to colors makes the lines vibrate. In the end there are many spills and flaws and imperfections and recoveries and those are my favorite parts of this work.

Michael Gayk
College Station, Texas.



Tube Chainmail (Detail), Egg and Dart (Detail), and Biolific (Detail).

My work is rooted in craft history and process. My metal vessels are represented in various formats from drawings, prototypes, precious metal, and algorithms. The work done at the Center for Machine Arts is an investigation in machine patterns that refer to regular or recurring structures, behaviors, or trends that can be observed in the context of pattern recognition. Pattern recognition is crucial, in traditional craft techniques such as chainmail, weaving, and pottery, pattern represents building, as well as in machine algorithms patterns are used to build predictions. Chainmail pattern of interconnected rings provides strength and flexibility to armor, similarly, in machine learning, algorithms are designed to identify patterns in data to make predictions or classifications. It's important to note that these connections between chainmail (Craft) and machine patterns are metaphorical and conceptual. Chainmail is a physical structure designed for protection, while machine patterns are mathematical abstractions used in the field of machine learning. However, drawing these analogies can help highlight common principles related to structure, pattern recognition, and computational thinking.

Al Larsen
Burlington, VT



So Be It, Bro 18 x 22,
T.U.L.W.A. 8.5 x 11
T.U.L.W.W.T.H.B. 8.5 x 11
inks on paper

Looking at the pieces in this series I am reminded of the illustrated stories that enchanted me as a very young child, especially *Harold and the Purple Crayon* by Crockett Johnson and *Danny and the Dinosaur* by Syd Hoff. Each of those stories interjects a kind of fantastical weirdness into the everyday – Harold, for instance, creates new realities for himself by drawing them.

Childhood and adolescence seem to me to be inherently confusing, weird times because we have many first experiences before we have settled frameworks for understanding them. Stories like *Harold and the Purple Crayon* and *Danny and the Dinosaur* speak to the strangeness of lived experience while leaving its interpretation unsettled, open. In my work in visual art, video, music and performance I am drawn to accessing and expressing a kind of continued uncanny that stretches across the lifespan, extending to unsettled encounters with topics such as mortality, climate change, memory, the limits of language.

I experimented by running the plotter multiple times, switching out pens and using my hands to move the paper around while the pen was drawing. Interfering with the efficiency, precision and reproducibility inherent to the plotter resulted in chaotic layers of irregular lines, a kind of record of my performance in relation to the performance of the machine. In making artwork I am always interested in this process of setting up conditions for mistakes, glitches, slip-ups. To me the work is exciting when it feels haunted by the process of its creation.

June 2023 Inaugural Cohort
Center for Machine Arts
189 North Water Street
Peekskill, NY

Give us a shout

Instagram: centerformachinearts
Twitter: ctr4machinearts
#CenterForMachineArts

This summer at the Center for Machine Arts, is hosting two weeks of immersive workshops, one in June (11th-18th) and one in July (16th-23rd). For each week, we a cohort of 6 individuals who fall into the categories of artists Hackers, Mechanical Engineers, Software Devs, and Electronic Engineers were invited. During their time at the Center for Machine Arts, groups have access to the full manufacturing capability of the Bantam Tools factory and a number of different types of machines including pen plotters, cnc machines, laser cutters, 3D printers, and more. Fabrication tools and printmaking infrastructure are in abundance.

This zine documents only a sample of the work created by The Center For Machine Arts June cohort that was exhibited on June 17, 2023. While not limited to plotter work, much of the work was done on pen plotters including vintage models and newly prototyped models not yet on the market.

HP 7550 plotters
Axidraw plotters
iDraw plotter
Custom plotters inspired by James Caruthers and David Bunch
OpenBuilds + Bantam plotter
Leo's postcard lotter
Bantam Tools Explorer CNC Machine
Bantam Tools plotter prototypes
Digraph Stencil Machine

