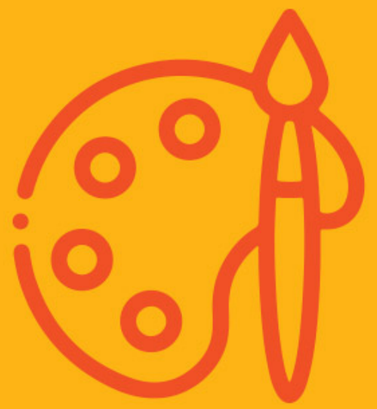
ESSPA 2023

The Digital Palette: Where Design, Art, and Code Converge

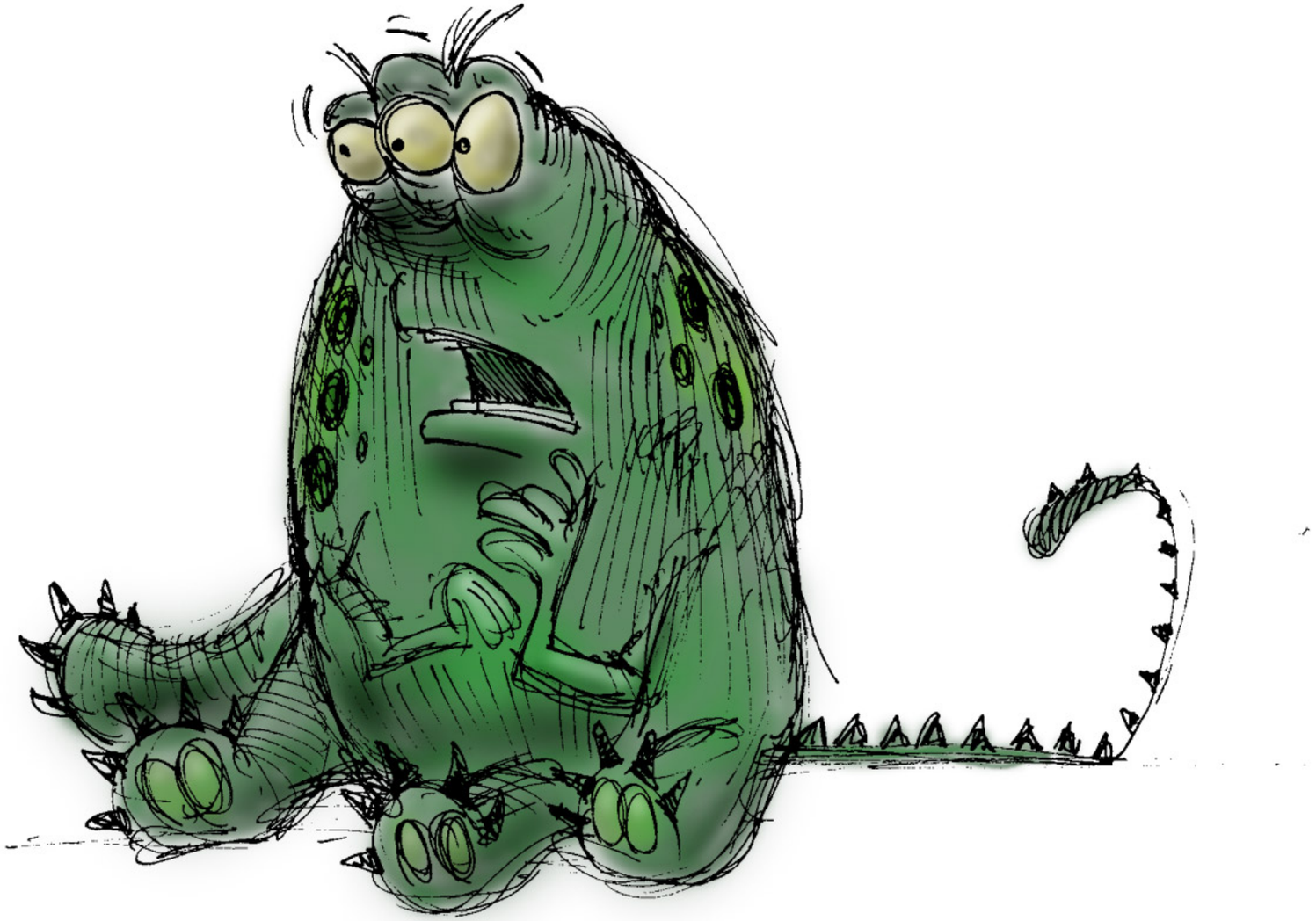
By Jeff Passetti

Discover how these creative forces come together to craft websites, interactive apps, and digital art with limitless potential, and how they can ignite your passion for the ever-evolving world of digital media and technology.



My evolution

Art to design to programming to teaching --- now all four at the same time.



Reintroducing:

BLOCK PARTY 2003

University Union Concerts and The Division of Student Affairs Presents:

GEORGE CLINTON & THE P-FUNK & ALL-STARS

4.27.2003 8:00PM
CARRIER DOME
$5 DOME Parking

Your student fee: **Getting y'all FUNKED UP**
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TICKETS ON SALE NOW @ THE
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$5 WITH SU ID

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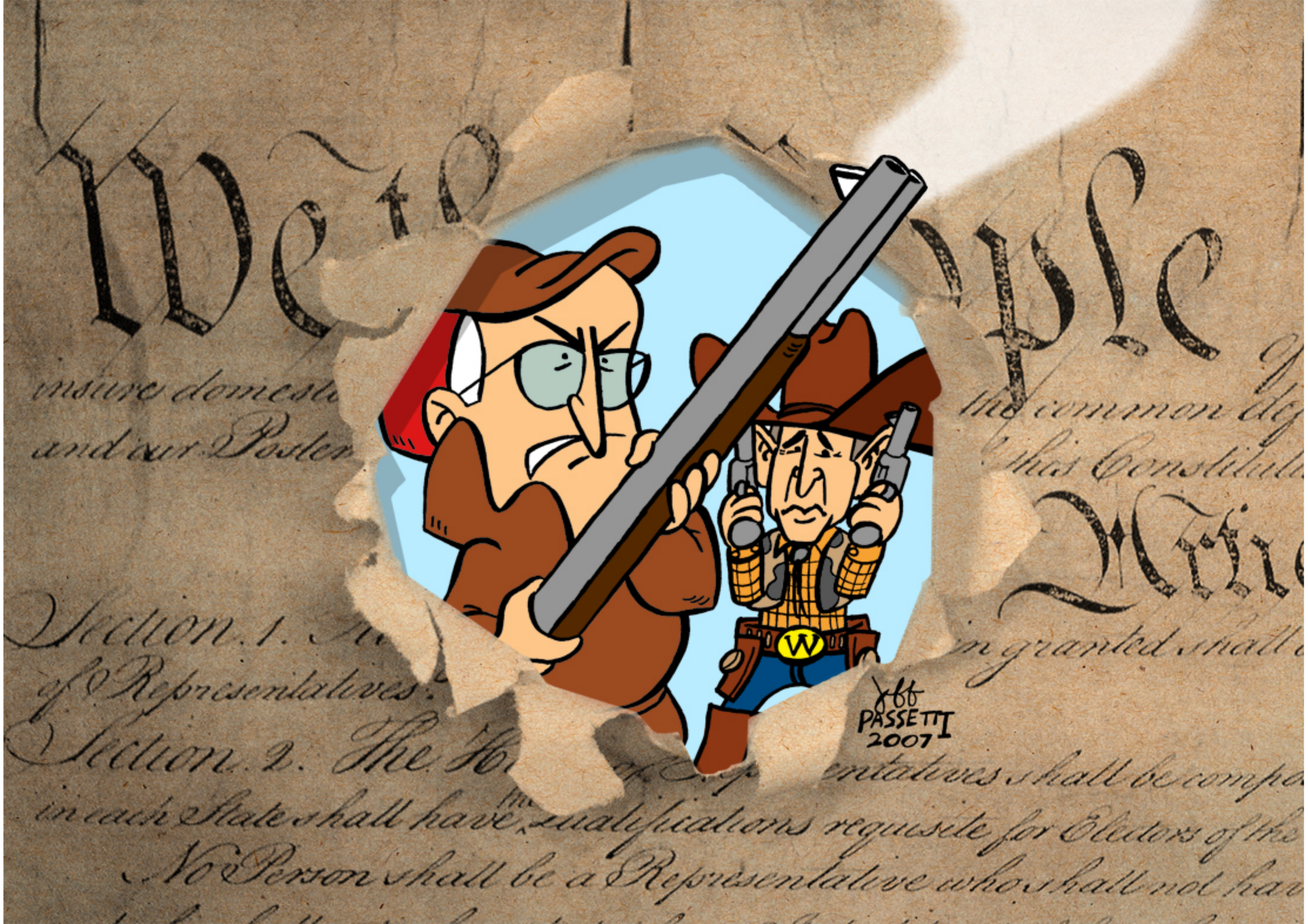
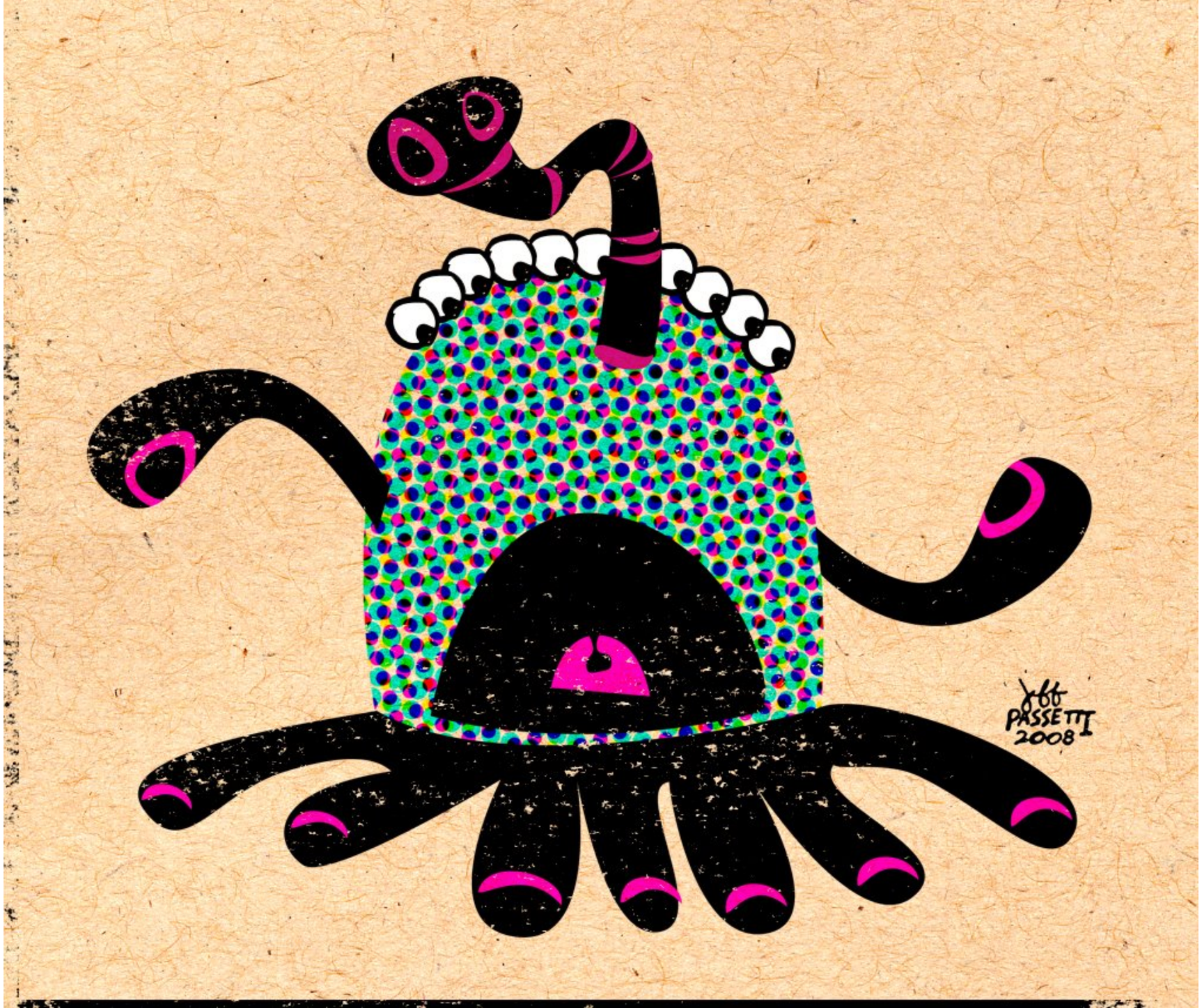
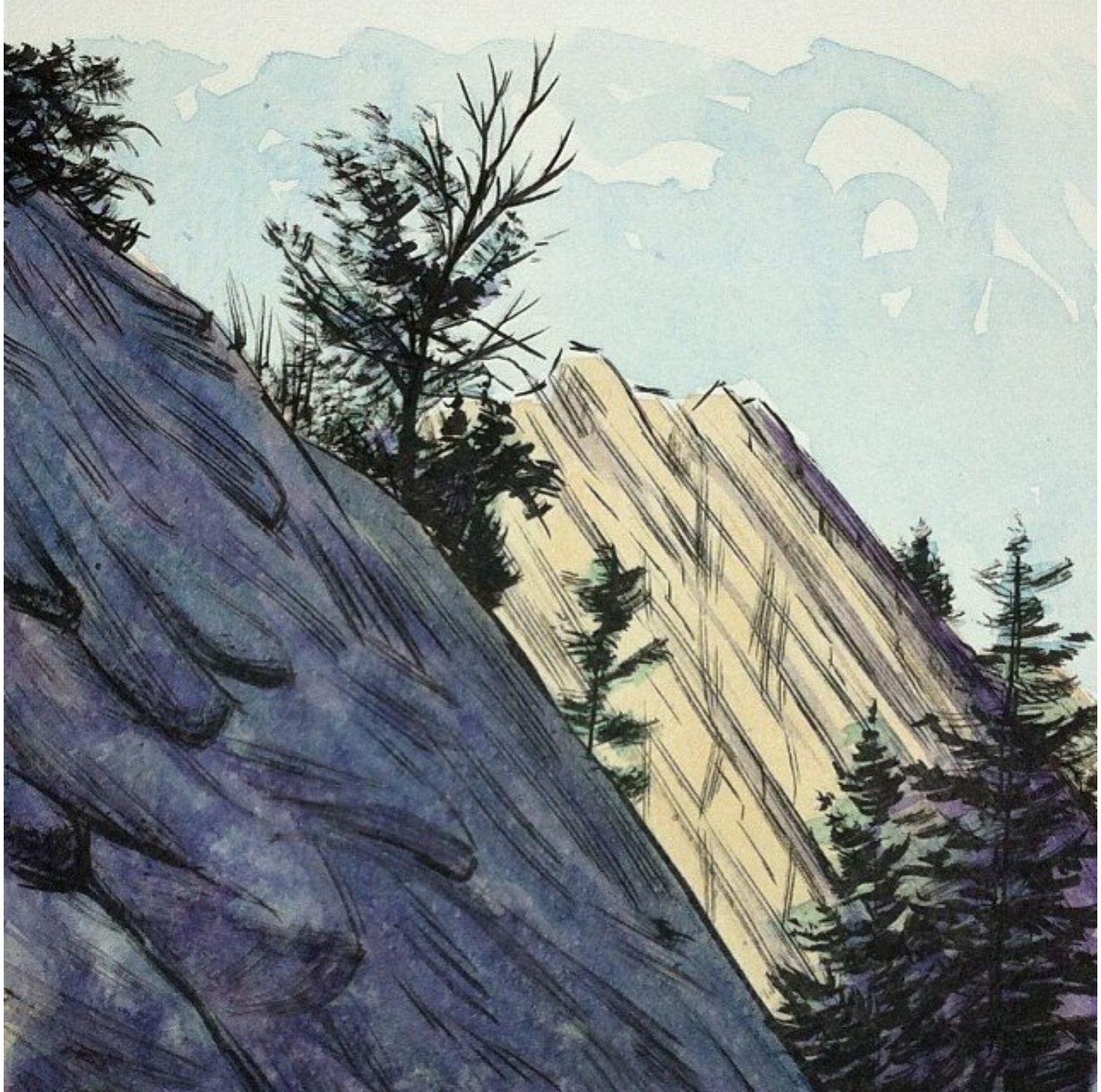

PASSETTI
2007


PASSETTI
2008

Dr.Ph.Martin's
BLACK STAR
WATERPROOF INK
MATTE
ARTISTS' WATER COLOUR SABLE
Pointed Round
Winsor & Newton



ARTISTS' WATER COLOUR SABLE ~ Round Winsor & Nev

Art

Art enriches our lives. It includes visual arts, architecture, music, literature, fashion, and many other forms.

Design

Everything around you has been designed. Its an influential role in our lives. From the chair you sit in, the device you're using to read this text, to the layout of your room and the apps on your smartphone, nearly everything you encounter has been intentionally designed by someone.

Newhouse SYRACUSE UNIVERSITY 50 1964–2014

1960s 1970s 1980s 1990s 2000s 2010s

SWITCH TO LIST VIEW »

1960s

1970s

1964

Newhouse 1 dedicated

READ STORY ›

1964

Military Visual Journalism program established

READ STORY ›

1968

Public Relations Student Society of America chapter established

READ STORY ›

1971

Newhouse S named

READ STORY ›

SUGGEST A STORY ›

#Newhouse50

NEWHOUSE LA

newhouse.syr.edu/la

Syracuse University
Newhouse School of
Public Communications

NEWHOUSE NYC

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Syracuse University
Newhouse School of
Public Communications

NEWHOUSE DC

newhouse.syr.edu/dc

Syracuse University
Newhouse School of
Public Communications

ONONDAGA JUNIOR SENIOR HIGH SCHOOL PRESENTS

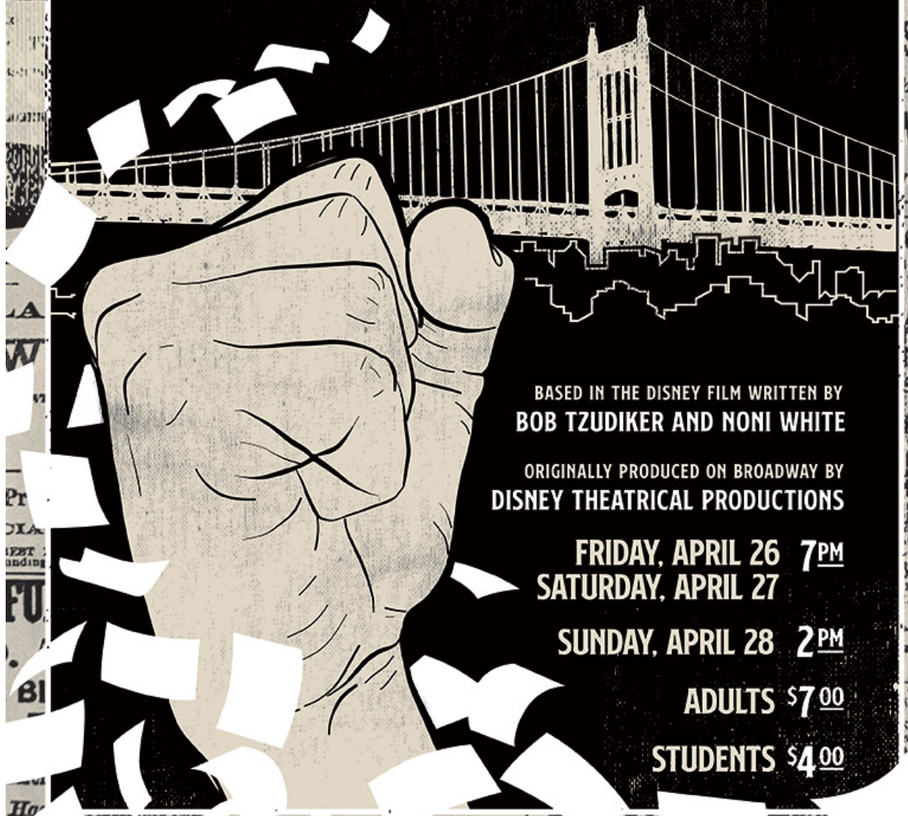
THE PRODUCTION OF DISNEY'S

NEWSIES

MUSIC BY
ALAN MENKEN

LYRICS BY
JACK FELDMAN

BOOK BY
HARVEY FIERSTEIN



BASED IN THE DISNEY FILM WRITTEN BY
BOB TZUDIKER AND NONI WHITE

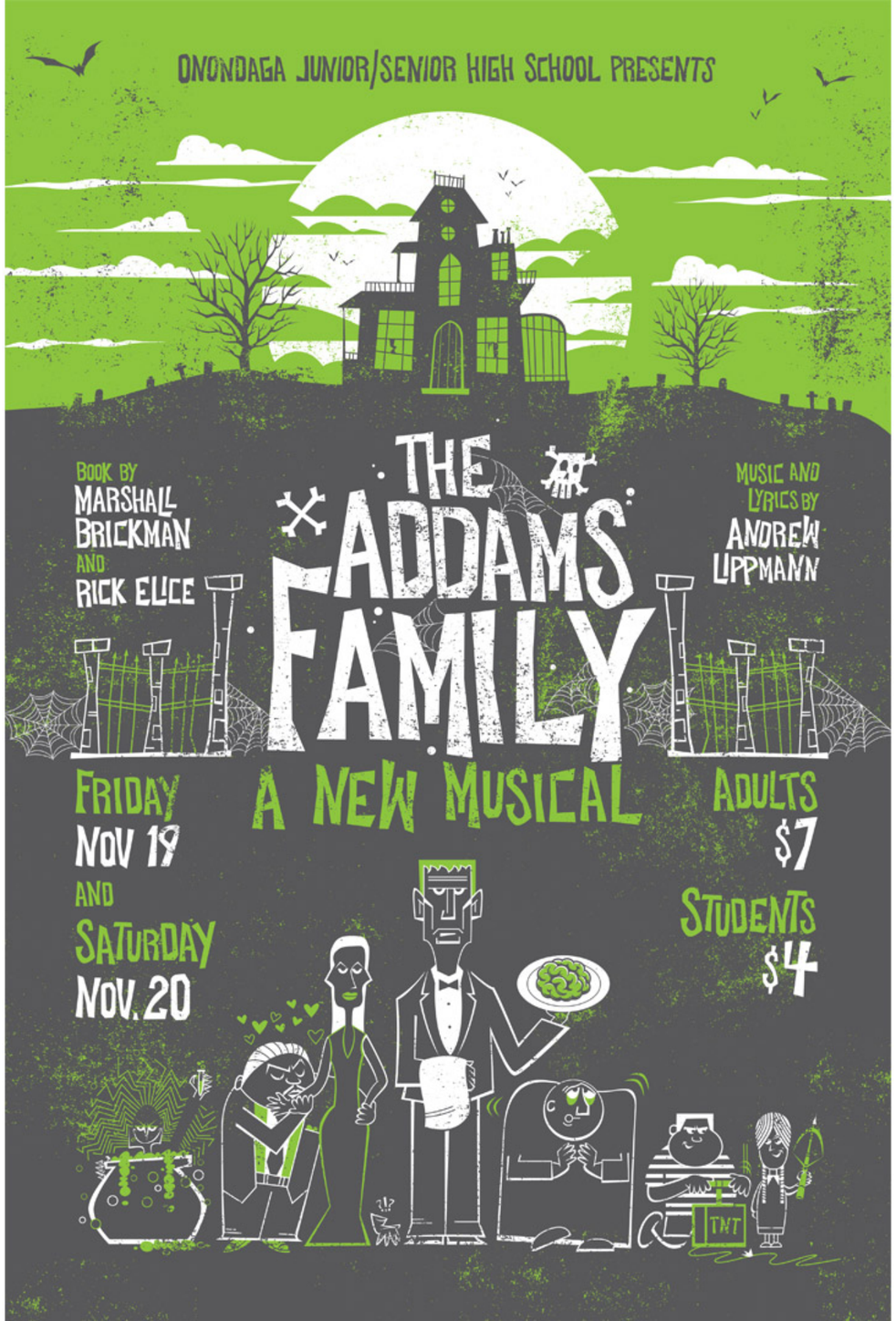
ORIGINALLY PRODUCED ON BROADWAY BY
DISNEY THEATRICAL PRODUCTIONS

FRIDAY, APRIL 26 7PM
SATURDAY, APRIL 27

SUNDAY, APRIL 28 2PM

ADULTS $7.00

STUDENTS $4.00


ONONDAGA JUNIOR/SENIOR HIGH SCHOOL PRESENTS
THE ADDAMS FAMILY
A NEW MUSICAL
BOOK BY
MARSHALL BRICKMAN
AND
RICK ELICE
MUSIC AND LYRICS BY
ANDREW LIPPMANN
FRIDAY
NOV 19
AND
SATURDAY
NOV. 20
ADULTS
$7
STUDENTS
$4
TNT

Code

Code is the digital language that forms the backbone to our modern civilization. It enables communication, innovation, and the functioning of nearly every aspect of our daily lives.

CODING

I learned HTML

```
<header>
    <a href="http://www.starbucks.com">
        <img src="images/starbucks-logo.jpg" alt="Starbucks" />
    </a>
</header>
```

CODING

I learned CSS

```
main {
    width: 640px;
    background-color: white;
    padding: 20px;
    color: #555555;
    border: 1px solid #ccc;
}
```

CODING

I've since learned jQuery (2009), PHP (2010), JavaScript (2014), React.js (2016) and Python (2016). But I started with HTML and CSS in 2006.

History of Convergence

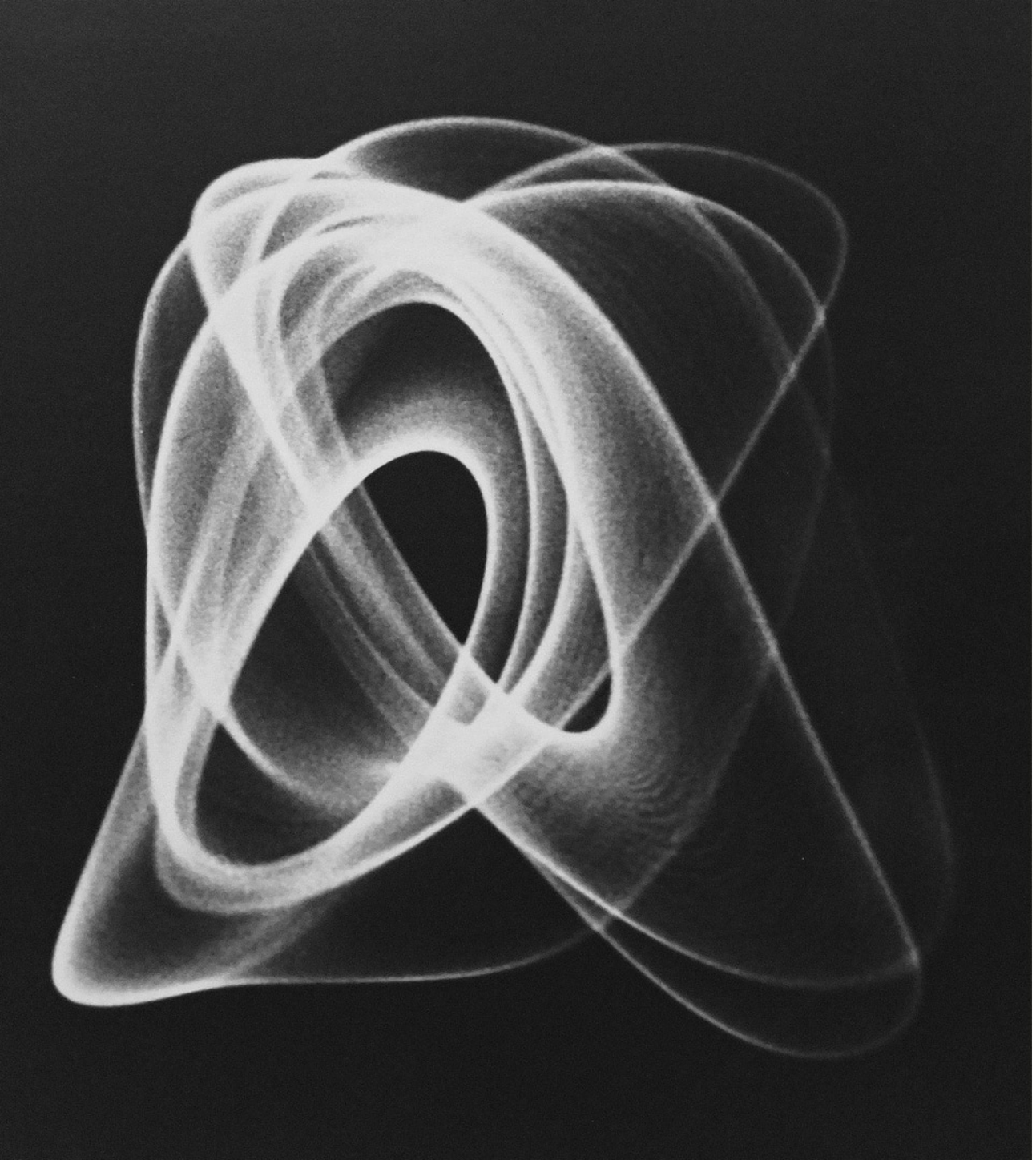
(Abbreviated)

There have been many pioneers and key moments that have shaped art/design/coding before your time.

It's beneficial to dive into history because you can learn from the past, find inspiration, recognize patterns, and you can appreciate the tools that you have today.

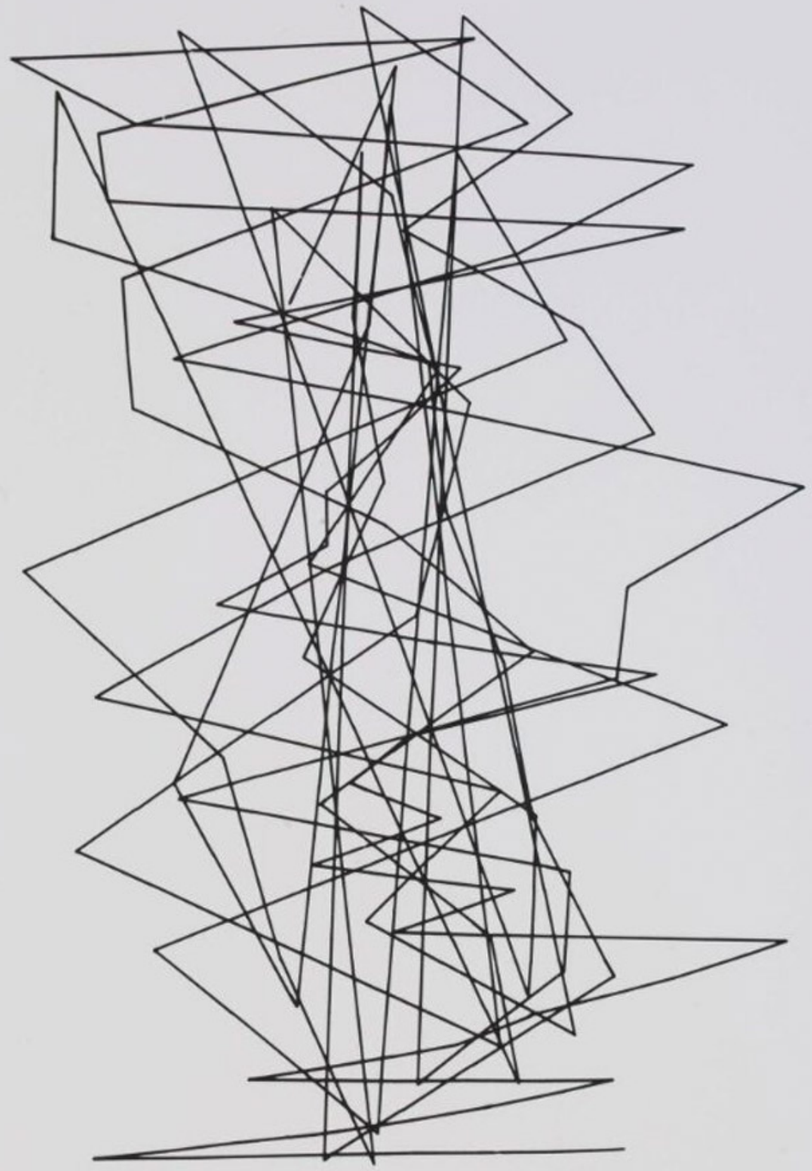
1950s

Artists and computer scientists started to use early computer technology to generate abstract electronic art and visual compositions.



Ben Laposky

Created abstract electronic art using an oscilloscope.



© AMN 1965

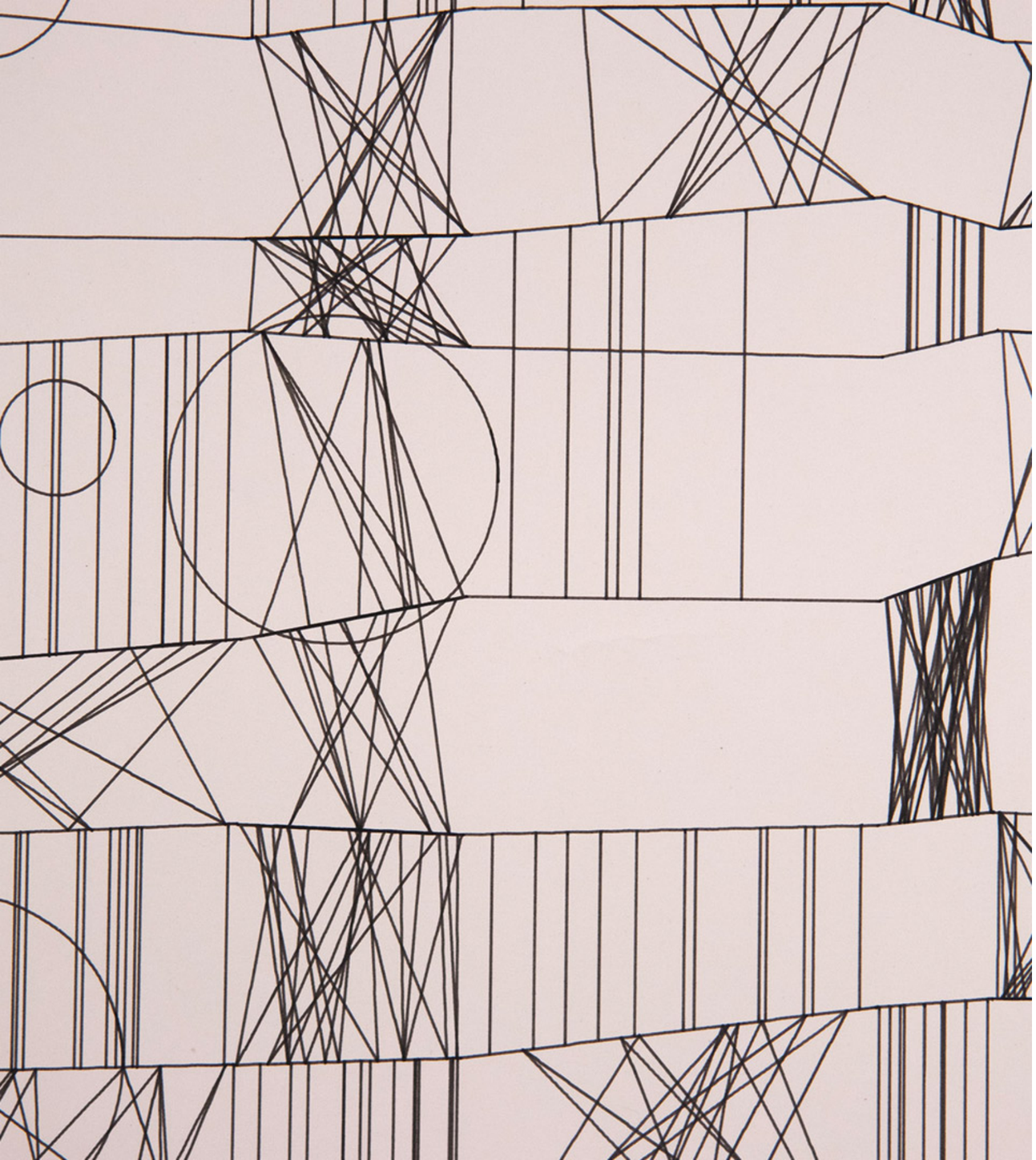
GAUSSIAN-QUADRATIC (1963)
BY A. MICHAEL NOLL

A. Michael Noll

Created computer-generated artwork using the computer's graphics capabilities at Bell Labs in the 1960s.

1960s

This decade marked a time of artistic experimentation (Pop Art, Minimalism, and Op Art), technological advancement (introduction of programming languages like COBOL and FORTRAN), and the early exploration of how code could be used as a tool for creative expression, especially with experimenting with early computer graphics and algorithmic art.



Frieder Nake "Homage to Paul Klee"

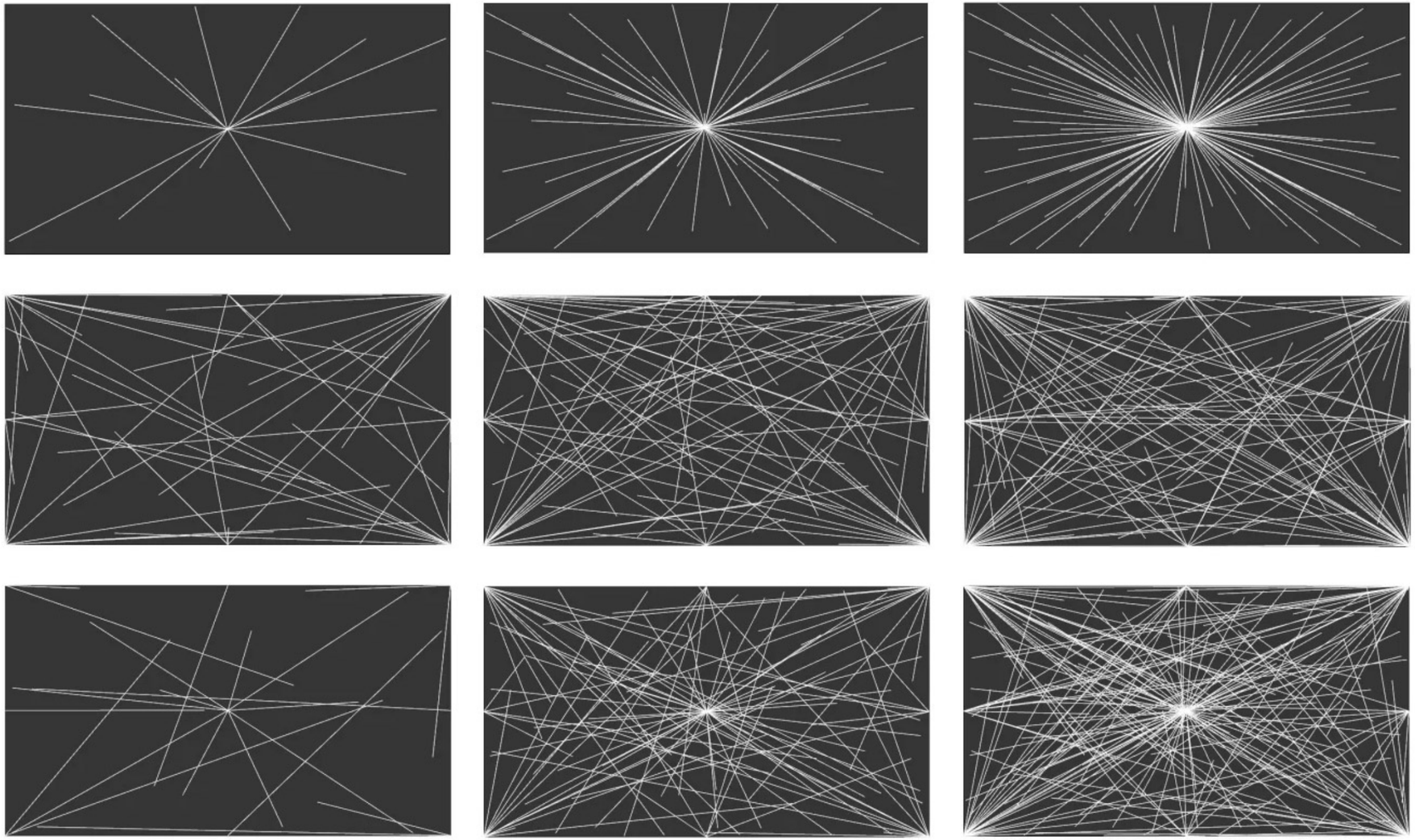
Created algorithmic art, demonstrating the potential of mathematical algorithms to generate artistic compositions.

Sol Lewitt

LeWitt is known for his groundbreaking use of systematic, algorithmic, and rule-based approaches to create art. He would write instructions and create diagrams on how to build his art, which could be executed by others.

Instructions for one of Lewitt's exhibition

“six-inch (15cm) grid covering each of the four black walls. White lines to points on the grid. 1st wall: 24 lines from the center; 2nd wall: 12 lines from the midpoint of each of the sides; 3rd wall: 12 lines from each corner; 4th wall: 24 lines from the center, 12 lines from the midpoint of each of the sides, 12 lines from each corner., 1976”



Fast forward through history

Computer graphics (1970s), desktop publishing (1980s), Internet and web design (1990s) and interactive media (2000s).

From the 2000s to today, we now have creative coding with Processing, data visualization tools, virtual reality (VR), augmented reality (AR), and digital installations at museums.

Processing (2001)

By Ben Fry and Casey Reas

They created their own programming language and development environment designed for artists and designers.

It has since become open source, a non profit organization, and has been a tool for artists, designs, programmers and educators to explore creative coding.

Matt Deslauriers

Matt Deslauriers' Meridian project is an exploration of generative art and code-driven creativity.

https://meridian.mattdesl.com/

Resources

- The Coding Train - Dan Shiffman has created a community dedicated to learning creative coding with beginner-friendly tutorials and projects on YouTube and more.
- Processing.org - Visit their Learn page, specifically their video tutorials.
- p5.js - p5.js is a JavaScript library for creative coding.

Demo

Questions?

School visits

I'm available to come to your school, demonstrate creating coding, and have you code with me.

If you're interested, please talk to your teacher and school administration and have them contact me.

Jeff Passetti
Adjunct Professor and Designer
Syracuse University

japasset@syr.edu

Thank you

Enjoy the rest of your 2023 ESSPA Conference.