

*Chicago New Media 1973-1992*  
November 1 – December 15, 2018  
Gallery 400, University of Illinois at Chicago

## Extended Exhibition Checklist

### Essanay Studio

*Film Set for a Silent Western Featuring Broncho Billy at Essanay Film Studio, 1910*

Photograph

Courtesy the Chicago History Museum

Before Hollywood became synonymous with the film industry, Chicago was an early leading film center. Among its most prominent studios was Essanay Studios, which took its name ("**S and A**") from the first initials of its founders' last names, George K. Spoor and Gilbert M. Anderson. This film set for a silent western features Essanay co-founder Anderson, known as Broncho Billy, at Essanay Film Studios circa 1910. Essanay was the first studio to use the type of lighting pictured.

### Essanay Studio

*His New Job, written and directed by Charlie Chaplin, 1915*

Film converted to video, 31 mins.

Private Collection

Chicago motion picture studio Essanay gained distinction in the early part of the 20<sup>th</sup> century and attracted the burgeoning actor Charlie Chaplin in 1914. His New Job was the only Essanay film with Chaplin that was shot in the city. Production took place in the winter, and Chaplin found the weather so objectionable that he left for California. Essanay also had a studio in Niles Canyon, California where acclaimed Chaplin films such as The Tramp were shot.

Curriculum and Admissions Booklet, The School of Design in Chicago, 1938

Curriculum and Admissions Booklet, The School of Design in Chicago, 1948

Photographs of László Moholy-Nagy, the School of Design's Dearborn, Prairie and Ontario Classrooms and Art Exhibitions, photographer(s) unknown, Circa 1938-56

Dispatch

***“New Approach to Design and Institute Combines Art and Technology,” St. Louis Post,***

1951

Newspaper articles, reproductions

Courtesy IIT Paul V. Galvin Library

Photographs, academic booklets, and newspaper excerpts in this case come from the Illinois Institute of Technology's Institute of Design. The Institute of Design was founded in 1937 in Chicago by Bauhaus artist and educator Laőzlo Moholy-Nagy, who conceived of it as the New Bauhaus, a successor to Germany's influential post-World War I Bauhaus school that united the fine arts, craft, and design with modern industrial production. Blending a curriculum of art, design, and technology, the Institute of Design was in many ways a template for what would become the Electronic Visualization Lab (EVL) at the University of Illinois at Chicago. Artist and EVL co-founder Dan Sandin views the EVL as the third generation cyber era of the Bauhaus.

*View of Generative Systems Classroom, School of the Art Institute of Chicago, 1976*

Colored slide, photographer unknown. *Sonia Landy Sheridan Manipulating the Cromemco*

*Z-2D system with EASEL Software by John Dunn (Time Arts Inc.), 1982, photographer*

unknown, Both reproductions of 35mm photographic slides

Courtesy of the Daniel Langlois Foundation

Artist and academic Sonia Landy Sheridan founded the Generative Systems research program at the School of the Art Institute in 1970. Students and faculty in this pioneering academic program studied technological advancements and their impact on the arts. Sheridan used a 1970s commercial market microcomputer made by Cromemco to interact with a paint software program created by one of her former graduate students, John Dunn. After earning his MFA, Dunn worked for Atari before founding the California-based company Time Arts Inc. These images underscore the pioneering role Sheridan played in using industrial technology to create art, as well as her groundbreaking work in creating an interdisciplinary academic training ground for future artists.

Midway

*Mortal Kombat II*

1993

Arcade video game

Courtesy George Spanos

Chicago-based video game studio Midway Games created the widely influential video game *Mortal Kombat*. It was notorious for its graphic violence of live actors captured on video **incorporated as the game's visual assets and its bloody finishing moves**. The game featured responsive controls and quick frame rates for precision gameplay in arcade and home console environments. Its depiction of gratuitous violence sparked a 1993 congressional hearing called by legislators who hoped to ban the sale of *Mortal Kombat* and other games. **In the hearing's result, a ban was avoided and games stayed in stores, but a ratings system was established.**

Midway games in the early 1990s aligned with the countercultural, anti-authoritarian ethos shared by many young people at the time. The primary creators of *Mortal Kombat* are Ed Boon and John Tobias. The sequel, *Mortal Kombat II*, playable here, touted improved gameplay with crouching punches and easier combination moves, and more varied finishing moves. **This particular cabinet is a unique collector's item signed by Boom and Tobias as well as others who worked on the game.**

Jackbox Games

***You Don't Know Jack***

1995-2014

Video game

Courtesy Jackbox Games

Chicago's **Jackbox Games**, a precursor to, and later a spinoff from Jellyvision, established the conventions and mechanics of the party video game genre with ***You Don't Know Jack: The Irreverent Party Game (YDKJ)***, a play-at-home game show originally released as a series of game packs over the 1990s. As a non-violent multiplayer game, YDKJ offered an in-person social experience that was appealing to different groups outside of the perceived core demographics of video gaming. It is known for its conversational writing and voice

acting that naturally and quickly relates players to the game system, a feature which eludes many game makers to the day.

This voice-driven invitation into the game world served as the conceptual basis for the business-oriented artificial intelligence (A.I.) products that Jellyvision began to make in the 2000s. YDKJ functions as a historical precedent for the A.I.-driven natural language processing devices that are now increasingly ubiquitous. The version on display is the 1999 Playstation release that compiles several PC versions of the game. The game was rebooted by Jackbox in 2010, and it continues to be sold on contemporary platforms.

*Documentation of Live Computer Video Performance Electronic Visualization Event 2 in Chicago by Clark Dodsworth, 1976*

Reproductions of photographs

Courtesy UIC's Electronic Visualization Lab

In the mid-1970s, faculty and students from the Electronic Visualization Lab (EVL) at the University of Illinois at Chicago (UIC) convened a series of Electronic Visualization Events (EVE) that consisted of live performances comprised of sound, video, and computer graphics. These documentary photographs capture moments of the people and artwork from **EVE2 in UIC's Science and Engineering South building.**

Williams

*Defender, 1981*

Arcade video game cabinet with refurbished stenciling by This Old Game

Courtesy George Spanos

Williams Electronics was initially a pinball manufacturer founded in the 1940s that expanded into the coin-operated video game market in the 1970s. Former pinball programmer Eugene Jarvis led development for *Defender*, a game set on an alien planet that includes one of the earliest and best uses of side-scrolling and minimaps in gameplay. It was a difficult game that took time to learn and master. Minimal, functional graphics featured algorithms that governed the explosion animations instead of traditional frame by frame animation. It became one of the highest grossing video arcade games of the time.

Dan Sandin

*Image Processor*, 1971

Analog computer

Courtesy the artist

Sony

*Automatic Editing Control Unit*, Date unknown

Courtesy the Electronic Visualization Lab

Dan Sandin

*Five-Minute Romp Through the IP*, 1973

Video, 5 min.

Courtesy Phil Morton Memorial Archive

In 1971, Dan Sandin designed and built the first Image Processor, a programmable analog computer that processes video images in real time. Sandin worked in collaboration with Tom DeFanti, combining the Image Processor with computer graphics to create and perform visual concerts, Electronic Visualization Events (EVE), with synthesized musical accompaniment. The Five-Minute Romp is simultaneously an artwork produced by, documentation of, and instructional video for the Sandin Image Processor. A Trinitron cathode ray television and Sony Automatic Editing Control Unit are also included as technology that would frequently accompany the Image Processor for real time editing of live performances.

Phil Morton

*General Motors*, 1976

Video, 1 hour

Courtesy the artist

Phil Morton was a Chicago-based video artist and teacher who has had considerable influence on multiple generations of Chicago new media artists. In 1970, he founded the Video Area of the School of the Art Institute of Chicago (SAIC), which eventually became the

current department of Film, Video, New Media, and Animation. He frequently collaborated with Chicago artists off and on SAIC's campus, including Jane Veeder, Dan Sandin, Tom DeFanti, Jamie Fenton, and others.

*General Motors* is an open, consumer complaint letter to the automotive giant, delivered in the style of cyber-psychedelic video art. The piece is edited together from different sources, including recorded video, computer generated video, found footage, and processing through the Sandin Image Processor. More than simply complaining about the bad service he received on his custom Chevrolet van, Morton uses the voice of a **dissatisfied customer, expressed through his alter ego persona "Crosseye,"** to develop an overall critique of the power structures created by commercial interests that alienate people from the machines they come to depend on in their everyday lives. By delivering this critique through analog computer video processing, Morton drives the point into the future **as relevant for all users of today's software, which, like *General Motors*, exerts subtle control over the everyday lives of consumers.**

Cardboard Computer

*Farout*, 2016

Screen capture of a wrangle 3D model

Here, Morton's *General Motors* is given new life, displayed within a depiction of Phil Morton's custom van resolved as a 3D model (or .wrangle) for an expanded part of *Cardboard Computer's* Kentucky Route Zero universe. *Cardboard Computer* was founded in Chicago and incorporates much of Chicago's new media history into its game world.

Bally

*The Bally Astrocade*, 1977

Console

Courtesy Dan Sandin

Designed at Bally by a group of developers led by Jamie Fenton, *The Bally Astrocade* is a home video game console and computer system. *The Bally Astrocade* originally used the ZGRASS platform, developed by Tom DeFanti and others at the Circle Graphics Habitat (now the UIC Electronic Visualization Laboratory) in its development. The specifications of

the Astrocade supported noteworthy arcade games such as Wizard of Wor, which would later be an inspiration for Jake Elliott of Cardboard Computer as well as the framework for Anna Anthropy's *Lesbian Spider Queens from Mars*.

Jane Veeder

*Montana*, 1982

Video, 3 min.

Courtesy the artist

Veeder's *Montana* is a pioneering work of computer generated graphics and animation that blends iconography of nature, technology, and Americana into an encouragement for others to begin "electronically visualizing" their own futures, as she was doing with the new media tools at hand. It is notable as a work of early video artwork that generates imagery computationally rather than manipulating lens-based video through computer methods. *Montana* is also the first work of computer-generated animation acquired by the Museum of Modern Art (MoMA). In a 1982 press release, MoMA mentioned *Montana* as emblematic of Chicago-based video production through analog computers, a style that could be considered "a school of its own."

Natalie Bookchin

*The Intruder*, 1998

Screen recording of video game

Courtesy the artist

Through ten game levels, the player navigates a short love story based on one of the same name by Argentinian writer Jorge Luis Borges. Each level references developments throughout the history of computer games, with the first stage resembling figurative elements in Pong, moving through representations of violence that echo the storyline. An exchange of information is given after players succeed or fail levels, as the game warrants critical play by mobilizing feminist perspectives spotlighting the patriarchy and analyzing the power of video games. Authored in Jamie Fenton's *Director*, and published as a Shockwave game, the work's ability to be accessed online allowed the artist to reach new audiences, as the interactive narrative combined video and computer game art with

Spanish-language literature. Bookchin graduated from the MFA program at the School of the Art Institute of Chicago in 1990.

Siebren Versteeg

*Emergency*, 2002

Real-time rendering computer program

Courtesy the artist

Unlike pre-recorded video works elsewhere in this exhibition, *Emergency* is a computer program generating animations and sound in real-time. As long as the program is run, the work will continue to animate a variety of emergency vehicles dashing across the screen with corresponding emergency sounds, juxtaposed with the calm, indifferent background and foreground of static trees, sky, and a faint animation of birds flying. Although this juxtaposition is always the same, the selection and ordering of vehicles and direction of bird flight varies every time the program is run, making each experience similar yet unique. Versteeg is an alumnus of both the University of Illinois at Chicago and the School of the Art Institute of Chicago. His body of work is among the most prolific of Chicago new media artists who began their careers in the 1990s and early 2000s.

Jason Salavon

*Everything, All at Once (Part III)*, 2005

Live broadcast television, computer program, computer, audio, projector, monitor

Courtesy the Carl & Marilyn Thoma Art Foundation

Featuring custom-designed computer software, *Everything, All at Once (Part III)* uses an input cable signal, converting live broadcast television into a circle of concentric stripes of **color by averaging the broadcast program's video frames into individual** colors. The work, contingent on what comes through the input and reacting to the changing channels, creates a tunnel of colors that radiate and dilate, continually changing, reconstructing, and reacting to its stimuli. After earning his MFA from The School of the Art Institute of Chicago (SAIC), Salavon worked as a video game programmer, and is now an associate professor and research fellow at the University of Chicago.



Sabrina Raaf

*Translator II: Grower*, 2004

Installation

Courtesy the artist

A small “rover” and a carbon dioxide (CO<sub>2</sub>) sensor communicate wirelessly as the Grower responds every few seconds to the amount of CO<sub>2</sub> levels in the air. The sensor takes a reading, and Grower responds with a vertical drawing on the wall in green ink. As more people enter, spend time, and breathe in the space, the drawn line becomes longer directly responding to the increased activity. Producing an accumulation of lines that can be viewed as a cross section of grass, the involuntary cooperation between the machine and viewers **creates a visible result. As the Grower “nests” in the space, participants are able to track the growing pattern and develop a sensitivity for their own environment.**

Sara Ludy

*OTHA*, 2011

Video, 3 minutes 40 seconds

Courtesy the artist

Moving through imaginative spaces and exploring the complexity of everyday life through **domestic interiors, Ludy’s works use the digital realm as a medium to experiment with** digital presence. After moving from a small town in the Blue Ridge Mountains to attend the School of the Art Institute, Ludy began working with video and sound art, abandoning formal painting to create in digital space. *OTHA* explores the presence of light in modernist architecture within a prefabricated house in Second Life, a free online multiplayer game that hosts millions of creatives exploring, designing, and communicating in an alternative digital world.

Sara Ludy

*Sky Canyon*, 2018

Video, 6 min.

Courtesy the artist

Located across the room, the architectural interior space of OTHA contrasts with the built imaginative exterior landscape in *Sky Canyon*, a work from Sara Ludy's **Clouds series**. The series plays on the double meaning of cloud as an element of the physical landscape and digital data storage. Ludy uses fractal and turbulence plugins to generate series of images layered to create an abstract work that holds notions of a sense of place.

Anna Anthropy

*Triad*, 2013

Video game

Courtesy the artist

Anthropy is an influential writer, game historian, and maker of both digital and analog games. She is currently Game Designer in Residence at DePaul University. Her video game *Triad* is a playfully themed puzzle game in which the player maneuvers the sleeping arrangements of three lovers and a cat. Each character has their own unique bedtime quirks: one needs space because she turns over in her sleep, another has a tendency to roll off of the bed, a third has a snoring problem, and the cat jumps onto the bed in the middle **of the night. The player's objective is to accommodate the sleeping habits of each character while attempting to avoid a sleepless night full of kicks in the face.**

Nick Briz

*Apple Computers*, 2013

Video, 31:22 minutes

Courtesy the artist

**Produced as a remake of Phil Morton's General Motors, *Apple Computers* offers a critique of the planned obsolescence and upgrade culture evident in today's technologically reliant society. The piece consists of an amalgamation of interviews and works by new media artists, phone conversations with Apple customer service, Briz's digitally altered rants, and footage of Steve Jobs. *Apple Computers* contrasts the creative and collaborative development work of new media artists and independent web developers with the profit-grabbing schemes exerted by tech giant Apple, including the copyrighting and constant upgrading of technology.**

Cardboard Computer (Jake Elliott, Tamas Kemenczy and Ben Babbitt)

*Un Pueblo de Nada (Kentucky Route Zero interlude)*, 2018

Video game

Courtesy the artist

In 2013, *Cardboard Computer* introduced the sprawling, understated Kentucky Route Zero (KRZ) project as a transmedia artwork centered on a core set of five video game acts. Since then, the video game art collective has created four of the five playable acts, four video game interludes that fit between those acts, a gallery exhibition in Philadelphia, a physical haunted telephone, a live auction for that telephone (presented by VGA Gallery in 2015), a synth band, a music video, a local television broadcast, and a veritable universe of mysteries and secrets for audiences to sift through.

The members of *Cardboard Computer* graduated from the School of the Art Institute of Chicago. Their work in video games functions as a bridge between the experimentalism of the 1970s and 80s UIC and SAIC communities and the indie and art video game production of our current moment. *Un Pueblo de Nada* is the fourth KRZ interlude and has particular resonance with the history presented in this exhibition, although every part of the KRZ project is connected to Chicago new media in its own way.

In the game, the player takes the perspective of Emily, the producer of WEVP-TV, a community access television station that exists within the KRZ world (and sometimes in our own). As Emily, players observe a live studio broadcast as well as the creative community of WEVP-TV during a tempestuous storm. The scene features a recreation of the Sandin Image Processor, among other references to Chicago new media art. The story and characters all contribute to the deepening of the KRZ universe, but as a standalone work, it distills a feeling of the chaotic yet creative spaces functioning under the pressured conditions and scant resources shared by multiple generations of Chicago new media art communities.

Jeffery Daniels

*Lift*, 2018

Video game

Courtesy the artist

Jeffrey Daniels, a Chicago artist and educator, combines art, play, and cultural criticism in his work with game development. About his creation of art games, Daniels has said, “For me there’s no question that play is art. The words are almost synonymous. If you’re playing, you’re creating something. Play is a base form of experimenting, and that experimentation allows me to understand and recreate the world that I’m in, and also to collaborate with others about what that world should be. Just playing tag is making art, because as I’m chasing you I’m working within a rule system, but I’m also using my creativity to convert those rules or conditions in a way that expresses my own individuality. In that way, I’m making art.” *Lift* is an example of an art-as-play perspective.

Early coin-operated video games often display a diagnostic startup sequence before the game begins. *Lift* references and makes playable a similar diagnostic mode to explore ideas of prologue in a specific historical context. The simple game uses ASCII characters (or more specifically, PETSCII, the version of ASCII used for the Commodore Personal Electronic Transactor computer) to render spontaneous faces and graphics based on the user’s input. Unlike many video games, there is no explicit “win” state. The game is instead an invitation to interact with the computer as an expressive device. This approach is exemplary of a contemporary movement in indie and art video game-making that eschews winning and losing for appreciating aesthetic scenarios in digital space.

Tom Defanti, Dave Nutting Associates

*Datamax UV-1*, Circa 1977

Courtesy the Electronic Visualization Lab

The *Datamax UV-1* evidences the collaboration between industry and academia in the 1970s. It was developed by Electronic Visualization Lab co-founder Tom DeFanti along with other computer artists and scientists, while the EVL was still known as the Circle Graphics Habitat. The machine was made to process graphics through DeFanti’s **GRASS** programming language. Later, the specifications of the UV-1 became a model for the Bally/Midway home video game console the Bally Astrocade after DeFanti became acquainted with Dave Nutting, a chip maker and contractor for Bally/Midway. *The Datamax UV-1* and its cousin the Astrocade stand as artifactual evidence of the connection between experimentalism and the commercial industry in Chicago new media.

John Hart Ellen Sandor and (art)n: Stephan Meyers, Janine Fron and Craig Ahmer  
*Fractal Forest*, 1991

Virtual Photograph/PHSCologram: Cibachrome, Kodalith, Plexiglas Details from John Hart's  
Fractal Forest animation shown at the SIGGRAPH '91 Electronic Theatre

This is a forest that existed only inside a computer. It is made out of highly detailed (fractal) shapes that look like objects in the real world, such as trees and grass. The elm trees are trunks with smaller elm trees growing out of them. The branches of the pine trees are smaller pine trees themselves. Each blade of grass is actually a tiny field of grass—so tiny that you cannot see them here. These objects are constructed from smaller copies of themselves. **This is called “self-similarity”, and is the way most fractals are made.**

Ellen Sandor and (art)n: Diana Torres and Azadeh Gholizadeh William Robertson, Co-  
Founder/CTO Digital Museum of Digital Art

Special Thanks to Janine Fron Voice over by Rachel Bronson, President and CEO of the  
Bulletin of the Atomic Scientists In Memory of Martyl (Inventor of the Doomsday Clock)  
*Have a Nice Day II: VR Tour Through the Doomsday Clock*, 1947-2017

Virtual Reality (Unity for Oculus Rift)

Courtesy Ellen Sandor

Produced 15 years after the original *Have a Nice Day*, this body of work reveals heightened threats of nuclear warfare, growing tensions between nations, and environmental factors of climate change, along with positive scientific discoveries that could improve medicine and have many more beneficial applications.

In this reimagined virtual landscape the player explores the Los Alamos desert site of Project Y and navigates through the Doomsday Clock timeline, from 1947 to 2018. The Doomsday Clock is a symbol that represents the likelihood of a human created global catastrophe. All the textures of the landscape are a montage of Doomsday clock image **artist Martyl's landscape paintings of the same location. Each station contains visual cues that symbolize major events that occurred in specific year.**

2018:

**“World leaders have failed to respond effectively to the looming threats of nuclear war and climate change, making the world security situation as dangerous as it has been since 1953. The greatest risks arise in the nuclear realm but the dangers posed by climate change are urgent. Most importantly, there has been a breakdown in the international order. This is our wake up call. Leaders react when citizens insist that they do, so in this chapter our goal is to push back the hands of the Doomsday Clock.”**

In Memory of Martyl (Inventor of the Doomsday Clock)

Dan Sandin (virtual environment), Tom DeFanti (electronic visualization partner), Dick Ainsworth (kayaking partner), Laurie Spiegel (sound)

***From Death's Door to the Garden Peninsula*, 1999**

Video documentation

Courtesy the Dan Sandin

Dan Sandin

*Looking for Water*, 2001-2005

Video documentation

Courtesy the artist

Dan Sandin, Josephine Anstey, Annette Barbier and Dan Neveu, Geoffrey Allen Baum, Drew Browning, Beth Cerny Patiño, Margaret Dolinsky, Petra Gemeinboeck, Marientina Gotsis, Alex Hill, Ya Lu Lin, Josephine Lipuma, Brenda Lopez Silva, Todd Margolis, Keith Miller, Dave Pape, Tim Portlock, Joseph Tremonti

*EVL Alive on the Grid*, 2001

Video documentation

Courtesy the artists

Daniel J. Sandin, Robert Kooima, Thomas A. DeFanti, Laurie Spiegel

*Particle Dreams in Spherical Harmonics*, 2011

Video documentation, 16 min 48 seconds.

Courtesy the artists

This program includes four videos of documentation and work related to the CAVE, the virtual reality environment and graphics processing system originally developed by the Electronic Visualization Laboratory (EVL) in the early 1990s. Different VR experiments have followed the work of the CAVE. This video document that history as it extends into the 2010s. The Chicago tradition of virtual reality environments continues to this day with the ongoing development of CAVE2, a new cylindrical version of walk-in VR theater currently on **display at UIC's EVL.**

Tiffany Funk (interactive visualization) with Jon Cates and Jonathan Kinkley (data compilation)

*Chicago New Media Interactive Timeline*, 2018

Data visualization

Dan Sandin, Tom DeFanti, Richard Sayre

*Sayre Glove*, 1977

Electronics, glove

Courtesy Dan Sandin

*Sayre Glove* is the first wired data glove created by Sandin and DeFanti based on Richard **Sayre's idea at the Electronic Visualization Lab at UIC. The glove uses light sensors to** provide a measurement of finger flexion registered by the angle transducers. The angle transducers are the flexible black tubes, which contain a light source at one end and a photocell at the other. The measurement of finger flexion varies the amount of light the photocell receives. It is an inexpensive, lightweight glove effective for multidimensional control, but mainly to manipulate sliders that affect different graphics settings. In 1976, the glove was used with the GRASS system, a computer programming language created by DeFanti.

Murray Consulting: Dan Sandin, Drew Browning, Glen Murray, Greg Dawe, Maggie Rawlings

*Wanda*, 1999

Virtual reality control device

Stereographics Inc.

Courtesy the Electronic Visualization Lab

Murray Consulting: Dan Sandin, Drew Browning, Glen Murray, Greg Dawe, Maggie Rawlings

*CrystalEyes*, 1992

Virtual reality control device

Courtesy the Electronic Visualization Lab

This display includes technologies used to interface with the CAVE Automatic Virtual Environment, developed by the Electronic Visualization Laboratory. Referred to as the **“Wanda,”** the wand displayed here may be thought of as a 3D mouse. It used a tracking system that connected to the CAVE through a PC that is attached to a serial port. To see visuals in the CAVE Automatic, users wore stereoscopic 3D CrystalEyes liquid crystal shutter glasses.

Steve Heminover

*Control Panel*, 1988

Virtual reality control device

Courtesy the Electronic Visualization Lab

Interactive Image was a computer graphics-based installation created by faculty, graduate students, staff, and collaborators of the Electronic Visualization Laboratory at the University of Illinois at Chicago. It was designed for exhibition at the Museum of Science and Industry. The Interactive Image installation consisted of a large panel holding six built-in computer play stations, each with a bench for two, a control panel with buttons and a joy-stick for user interaction, a 12-inch monitor for user viewing, and a large monitor for broader spectator viewing. The installation presented a number of applications, including image resolution/ communication, fractals, graftals, interpolated animation,



symmetry/tessellation, and pseudo-color. Users interacted with on-screen graphics to manipulate various parameters to control the graphic results.

National Center for Supercomputing Applications

*Mosaic Web Browser, 1993*

Screenshot taken in 1997 of Mosaic browser

Courtesy National Center for Supercomputing Applications at the University of Illinois Urbana-Champaign and the Board of Trustees of the University of Illinois

Mosaic was the first widely used graphical web browser that helped popularize the Internet and World Wide Web. This screenshot shows the intuitive user interface, as well as its ability to display images inline with text instead of opening in a separate window. Mosaic was developed outside of Chicago by the National Center for Supercomputing Applications at the University of Illinois Urbana-**Champaign, a frequent institutional collaborator with UIC's** EVL and home to a huge body of research on a host of computational subjects over its long history.