

**MFA | COMPUTER**

**ARTS**



**Graduate Programs**

# Art and technology

have always been fantastic partners in creativity, and our MFA students consistently create great examples around that intersection. We place a strong emphasis on personal exploration by encouraging students to push their preconceived boundaries and embrace early experimentation as a critical part of the iterative process.

The MFA Computer Arts program emphasizes creativity and a multidisciplinary approach to producing innovative animation, motion graphics and experimental art within a collaborative state-of-the-art production environment. Our goal

is to develop artists who will continue to challenge norms, question standards and surprise people long after they leave SVA. Being based in New York City also offers a significantly enhanced cultural experience, including music, theater, food, museums and, of course, world-renowned art galleries.

Our students come from all around the globe, bringing unique cultural perspectives to the creative process. Our combination of small class sizes, working professionals as faculty and guest lecturers, provides in-depth exposure to all areas of animation, motion graphics and experimental art.

**—Terrence Masson, chair**



# About the Program

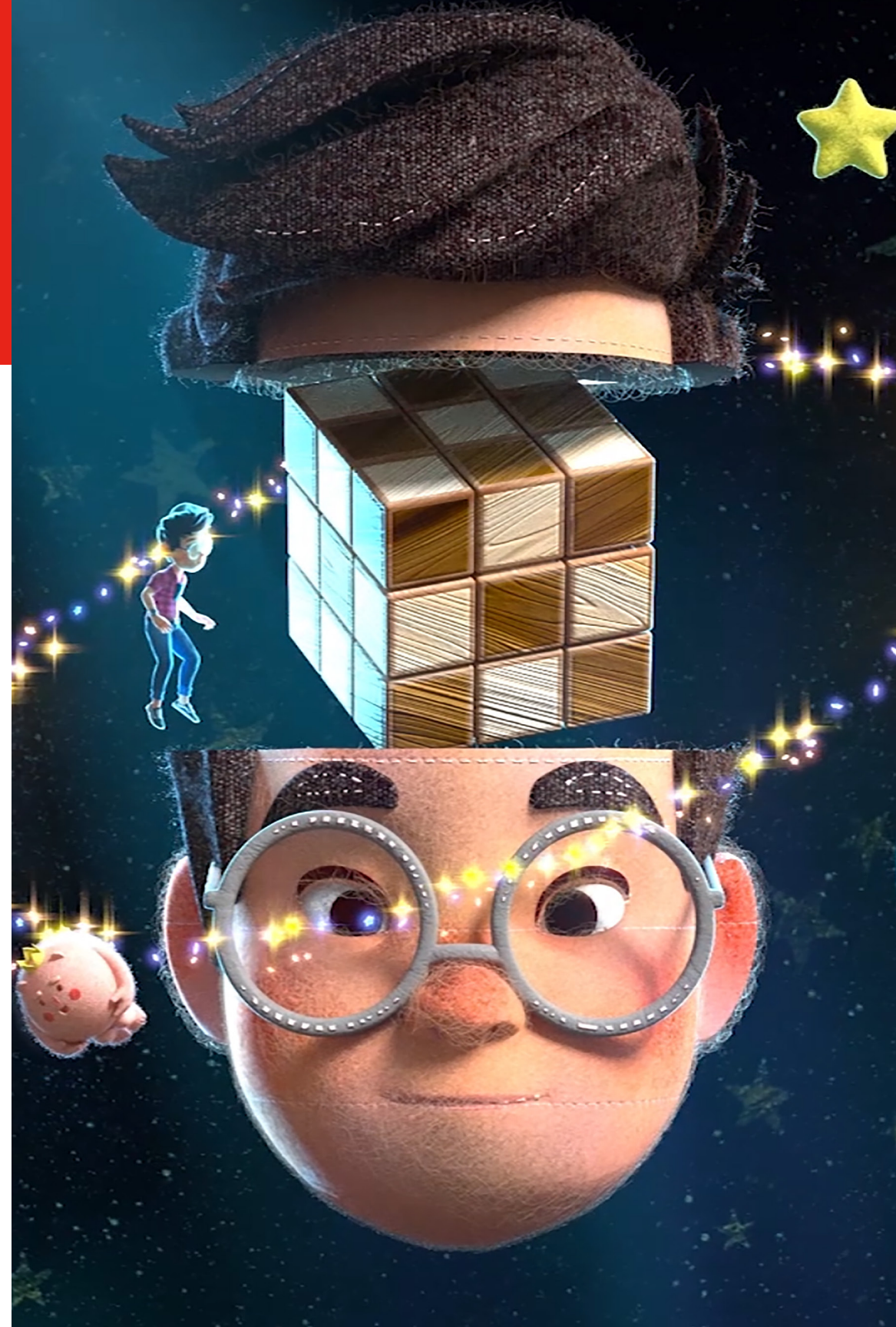
Yu Wang, *The Organized Life*, 2020

The MFA Computer Arts program at SVA emphasizes creative experimentation and a multidisciplinary approach to making art with computers and emerging technologies. Dedicated to producing digital artists of the highest caliber, the department guides students in the development of a personal artistic style in a course of study that is individually tailored to meet their needs. Students come from around the world to study in this two-year degree program, which has distinguished itself with nine Student Academy Awards.

- Founded in 1986 and with a network of over 1,000 alumni, the SVA MFA Computer Arts Department was the first MFA program in the U.S. to focus on computer art.
- The first-year curriculum strengthens and broadens the student's knowledge and creative approach to digital art in preparation for the thesis year.
- The second year revolves around the thesis process—the completion of a body of creative work, combined with academic research and an artist's statement.
- The first- and second-year academic programs are supplemented by workshops, visiting artists, guest lecturers and internship opportunities.

Graduates of the department are employed by the most prestigious companies and digital studios, including Adobe, Google, Industrial Light & Magic, Pixar, DreamWorks, Disney, Sony Pictures Imageworks, Blue Sky Studios, the Mill, CHRLX, MTV and Electronic Arts. Some alumni choose the entrepreneurship of their own businesses. Those who pursue fine art careers exhibit their work in museums and galleries, including the Solomon R. Guggenheim Museum, P.S.1/MoMA, Whitney Museum of American Art, Los Angeles Museum of Contemporary Art, San Francisco Museum of Modern Art, Smithsonian Museum of American Art, Digital Art Museum, Chelsea Art Museum and Tate Online. By combining creativity with academics, graduates have also published books and scholarly writings, and have chosen teaching careers at prestigious higher education institutions.

Awards have been bestowed upon our students by major international competitions, including Student Academy Awards, Adobe Design Achievement Awards, YouTube Awards, Prix Ars Electronica, SIGGRAPH, Electronic Theater and Art Show, Webby Awards, ISEA and the Leonardo Award for Excellence. Student works have appeared in such acclaimed festivals as Cannes, Tribeca, Sundance, Annecy, Ottawa and New York, among dozens of others.







# Motion Graphics Artist's Thesis Lands Her a Gig at CNN

"I've always loved to draw," says Melody Shih. "I like holding pencils and crayons in my hand." Growing up in Taiwan, she was the girl in class who covered the pages of her textbooks with cartoons. Her favorite class was art; it was the place where she found the confidence to pursue her budding passion. Looking back, she says, "I think that was where I realized I wanted to have the ability to communicate through art."

She went on to study at Taiwan's Kun Shan University, majoring in Visual Communication Design. After graduating, she began building a career as a graphic designer and illustrator. It was a perfect start to her life as a working artist, but for Melody, something was still missing. ►



“I remembered looking at my work and thinking, ‘It’s lacking something,’” she recalls. “It would be more engaging if I could make my illustrations move and tell the stories.”

She started researching graduate schools, and found the MFA in Computer Arts department at SVA, which offers a program in motion graphics. She watched videos created by alumni, and was amazed by what she saw. She felt certain that the work they were doing was exactly what she wanted to learn.

Moving to New York was both exhilarating and overwhelming. Melody was fascinated by the energy of the city, its crowded streets and deafening soundscape, but some days it overloaded her. Adjusting to a new environment and speaking a different language took time, but it also became a source of inspiration.

For her thesis project, she directed *Cacophony*, a short animation film for which she created a visualization of the sound in New York, transposing the feeling of things heard into colorful images and abstract patterns. Barking dogs, ringing phones, honking horns and chattering teeth fill the screen as a young woman stops at a city crosswalk. Overcome by the harshness of her urban environment, she takes a few deep breaths, and is transported to a place of inner calm, where the sound of her own heartbeat brings her a sense of peace.

The film screened in multiple festivals, garnering awards along the way. It was chosen as a Vimeo Staff Pick, and was posted onto the SVA website, which is where a manager in the animation and graphics department of CNN discovered it. Excited by what he saw, he contacted Melody, offering her a job as a motion graphics designer for the network.

“If I didn’t have this thesis film,” she says, “I wouldn’t have this job at CNN.”

Last year, Melody was lead designer on *Destroyed*, a work of animation which was nominated for an Emmy for Outstanding Graphic Design and Art Direction. The project told the story of hundreds of rape kits that were destroyed by police before the statutes of limitations on the crimes expired. The video’s release united lawmakers, politicians and victim advocates in a fight for change.

“It’s incredible to know that animation and visual storytelling is so powerful,” Melody says. “It can create real-world change.”



Character development for *Cacophony*, Melody Shih's 2016 student film



Stills from *Cacophony*

# Curriculum/ Sample Program

## 3D Animation

FIRST YEAR/FALL	CREDITS
3D Modeling and Animation	3
Animation Culture	3
Computer Systems I	3
Digital Art Seminar I	0
Narrative and Visual Storytelling	3
Programming for Animators	3
<b>FIRST YEAR/SPRING</b>	
Advanced 3D Techniques	3
Advanced Modeling and Rigging Concepts	3
Digital Art Seminar II	0
Digital Storyboarding	3
Technical Direction	3
Theory, Criticism and History of Time-Based Media	3
<b>SECOND YEAR/FALL</b>	
Character Animation	3
Dynamics and Particle Systems	3
Production Issues: Animation I	3
Thesis I	3
Thesis Research and Writing I	3
<b>SECOND YEAR/SPRING</b>	
Compositing	3
Production Issues: Animation II	3
Seminar in Musical Choices	3
Thesis II	3
Thesis Research and Writing II	3

The MFA Computer Arts program is multidisciplinary and features areas of concentration in animation, motion graphics and experimental art.

## 2D Animation

FIRST YEAR/FALL	CREDITS
Computer Systems I	3
Digital Art Seminar I	0
Motion Graphics I	3
Narrative and Visual Storytelling	3
Theory, Criticism and History of Time-Based Media	3
Web Programming I	3
<b>FIRST YEAR/SPRING</b>	
Digital 2D Animation: Tight Tie Downs	3
Digital Art Seminar II	0
Digital Storyboarding	3
Ecstasy & Apocalypse	3
Motion Graphics II	3
Web Programming II	3
<b>SECOND YEAR/FALL</b>	
Compositing	3
Motion Graphics: Visual Storytelling, Creative Strategy and Design	3
Production Issues: Motion Graphics I	3
Thesis I	3
Thesis Research and Writing I	3
<b>SECOND YEAR/SPRING</b>	
Production Issues: Motion Graphics II	3
Seminar in Musical Choices	3
Video Projects	3
Thesis II	3
Thesis Research and Writing II	3



# Experimental Art

## FIRST YEAR/FALL

	CREDITS
Computer Systems I	3
Creative Programming for Artists I	3
Digital Art Seminar I	0
New Media in Contemporary Art	3
New Forms in Media	3
Sound Workshop I	3

## FIRST YEAR/SPRING

3D for Fine Artists	3
Creative Programming for Artists II	3
Digital Art Seminar II	0
Emerging Practices: Nonlinear Storytelling	3
New Media Theory	3
Virtual Reality Storytelling	3

## SECOND YEAR/FALL

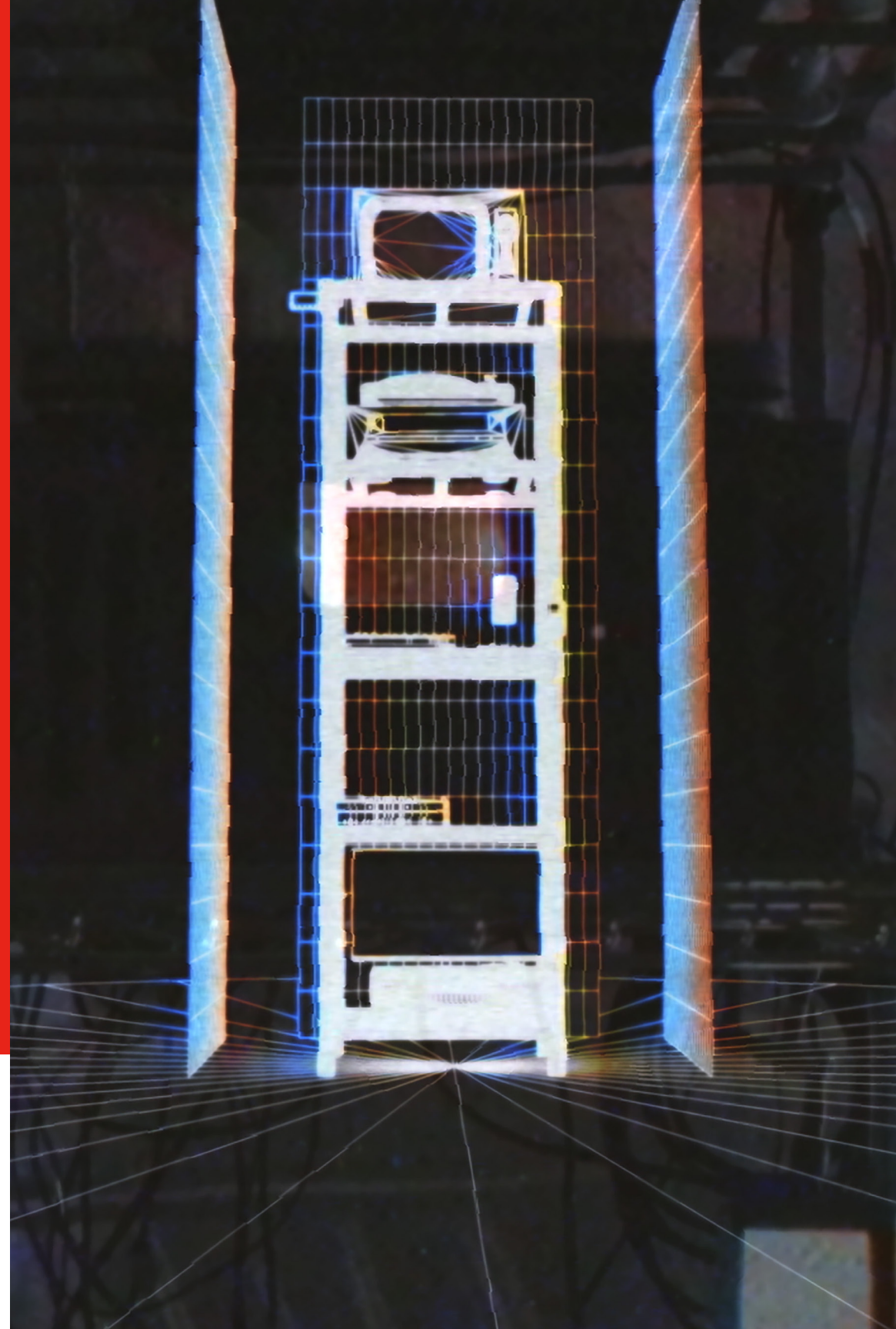
3D Design and Fabrication I	3
Emerging Practices: The Experiential Image	3
Sound Workshop II	3
Thesis I	3
Thesis Research and Writing I	3

## SECOND YEAR/SPRING

3D Design and Fabrication II	3
Emerging Practices: The Computational Image	3
Production Issues: Experimental Art	3
Thesis II	3
Thesis Research and Writing II	3

Santiago Messier, *Control: The Illusion of*, 2019

MFA COMPUTER ARTS



# Course Offerings

This is a sample of our recent course listings. For our full curriculum, please visit: [sva.edu/mfaca/curriculum](http://sva.edu/mfaca/curriculum).

## EMERGING PRACTICES: NONLINEAR STORYTELLING

Using a studio approach, this course will equip MFACA students working in the fine arts with both the technical tools and the conceptual framework to approach new practices and art forms in relation to computational storytelling. Topics include: the implications of installation and immersive media, themes of technology and the body, ongoing discourse in the culture of technology, the historical context of interactive and new media art. Students will explore alternative narrative forms that are computation-based through a broad sampling of tools and techniques, such as generative and interactive media, gesture and sensor-controlled software, digital fabrication, VR and projection mapping.

## ADVANCED MODELING AND RIGGING CONCEPTS

Creating animated characters is one of the most challenging aspects of modern cinema. Students will learn how to create 3D characters from design to modeling and setup through the development of a character pipeline. Considerations in character design, how to incorporate anatomy to improve character workability and how to develop a flexible nonlinear workflow will be covered. Modeling issues such as geometry types, topology and efficiency will also be explored. Rigging topics include kinematics, expression and binary nodes, joint placement and orientations, and binding and deforming skin geometry. By the end of the course, students will have created a character they can easily animate.

## CHARACTER ANIMATION

This course provides students with a workshop setting in which to deepen their understanding of professional practice and solve complex animation problems. It will focus on techniques such as forward and inverse kinematics, lip-sync and facial expressions, model deformation (morphing), animating lights and camera movement and rotoscoping. Acting techniques will be practiced so that students can better understand how to convey fluidity of movement and expression of emotion in animated characters. The course will be divided into lectures, demonstrations, tutorials, in-class exercises and critiques.

## CREATIVE PROGRAMMING FOR ARTISTS I & II

These courses are intended for students who have no prior exposure to programming and who want to build their own tools to create digital art. We will take a close look at the techniques used to program simple manipulations of video and sound works, and control these with a broad range of external controllers that are commercially available, as well as with simple camera and motion-tracking techniques. The course will consist of lectures and presentations,

with a short assignment after each session. Software and hardware include: Max/MSP/Jitter and the Processing language tool set; Arduino, iCube and other I/O devices; Korg Nano, QuNeo and MIDI-based controllers; Kinect, Leap and other 3D interfaces; and iPhone, iPad and smartphone apps that are able to control the computer.

## MOTION GRAPHICS I & II

Encompassing drawing, two- and three-dimensional animation, video, stop motion, photography and typographic elements, motion graphics extend beyond the commonly used methods of frame-by-frame animation and live action and create a conglomeration of multiple visual styles. Motion graphics can be used to creatively go beyond the rules of representation, thus augmenting the various ways that media artists can delve into their imaginations and express unique visual and aural works. While the primary software for these courses are Adobe After Effects and Cinema 4D, students are strongly encouraged to explore the creative software available to them, as well as experiment with traditional media. Project critiques will be given to develop an informed sense of refined creative expression. Advanced techniques relating to combining 2D and 3D animation, live action and stop motion will be explored in depth. Course work will be complemented by guest lecturers and workshops given by industry professionals. Students will complete the course with a reel that showcases both their creativity and knowledge of the software.



## DIGITAL 2D ANIMATION: TIGHT TIE DOWNS

Have you ever seen a fluid and dimensional piece of rough animation—a tie down—and wondered how to create one? This course will cover an overall approach to animation as a process. This approach will work for experienced animators looking to improve their technique or newcomers who want to get an overview of how great animation is made and try their hand at some fun explorations. Assignments will start with sketching/boarding, then move into layout and rough animation, culminating in a finished piece. Throughout the course, students will refine the same piece of animation until they start to see how this process can be applied to all animation jobs. Halfway through the semester, we'll start over from scratch to iron out mistakes in the first pass. The goal is to give students the tools to begin a career as a top-tier digital 2D animator.

## VIDEO ART AND BEYOND

This course begins by examining the emergence of video art of the 1960s, through structuralist films and the freewheeling days of “feedback” and “real-time” manipulation of the analog electronic signal. Students will examine how the barriers between artistic disciplines broke down as artists took up portable video cameras, experimented with installation, staged actions and went outdoors to build land art. Works of contemporary video artists who move freely between painting, sculpture, photography, film, performance and other media will be discussed, as well as the contributions by musicians toward developing new working methods. The course will consist of weekly screenings, analysis of installations, readings and written assignments.

## NARRATIVE AND VISUAL STORYTELLING

This course will study the structural elements underlying animated entertainment, both traditional and experimental narratives. Story structures will be analyzed to discover what content can be conveyed within 30 seconds, a few minutes or longer in art and entertainment. We will focus on the key elements of storytelling, including the development of concepts, such as the central dramatic question, inciting incident, idiosyncratic characters and spaces, conflicts and needs, mounting tension, reversals and resolution. Visual language will be addressed by gaining a familiarity with camera shots, movements, angles and placement. Through short assignments, students will develop original scripts, concept sketches, storyboards and animatics. The basics of previsualization will be covered. An examination of key works in the field is included.

## VIRTUAL REALITY STORYTELLING

In this course students will examine the fundamentals of cinematography and storytelling to bring them into VR/AR environments. We will address such elements as storyboarding, lighting cues, camera framing, sound effects and music. Students will begin with basic real-time production pipeline methods using Unity and will complete the course with a fully realized VR/AR project.

# Notable Alumni

### Ye Won Cho

*Ratatouille, Inside Out, Finding Dory*

### Yong Duk Jhun

*Kung Fu Panda, Shrek Forever After, The Croods*

### Nancy Kato

*WALL-E, Finding Nemo, Up*

### Erwin Redl

Whitney Museum of American Art, Bitforms Gallery, National Art Museum of China

### Carlos Saldanha

*Ice Age: Dawn of the Dinosaurs, Ice Age: The Meltdown, Rio*

### John F. Simon Jr.

The Museum of Modern Art, Solomon R. Guggenheim Museum, Whitney Museum of American Art, Los Angeles County Museum of Art

“I realized that combining multiple skills together to form unified, multidisciplinary projects is how I want and need to approach my work. The curriculum at SVA allowed me to explore and tailor my education toward multiple interests by picking a variety of completely unrelated classes.”

—Kamil Nawratil, MFA 2013

# Faculty

To learn more about the faculty members and to read their biographies visit: [sva.edu/mfaca/faculty](http://sva.edu/mfaca/faculty).

**Terrence Masson**  
chair, MFA Computer Arts  
Department

**Daniel Abramovich**  
illustrator; graphic artist;  
printmaker; stereoscopic  
supervisor, Blue Sky Studios

**Lotte Marie Allen**  
project coordinator

**Benton C. Bainbridge**  
visual artist

**Juan Beltré**  
motion graphics  
designer, animator

**John Benton**  
narrative designer in  
immersive technology;  
founder, Love8; producer,  
prgrm.org

**Anney Bonney**  
visual artist

**Kun-I Chang**  
creative director, visual artist

**Meng Chih Chiang**  
creative director, Mengdom  
Experimental Design Lab

**Terry Dame**  
composer, sound designer,  
instrument inventor

**Jon Dieringer**  
technical director,  
Electronics Arts Intermix

**Timothy Druckrey**  
author

**Mary Franck**  
creative director, ESI Design

**Lauren Gibbons**  
senior interaction designer

**Thyrza Nichols Goodeve**  
critic, writer

**Edgar David Grana**  
composer, collaborator

**Jeffrey W. Hagerman**  
director of photography,  
on set colorist, digital  
imaging technician

**In Pyo Hong**  
computer graphics animator

**Jamie Keesing**  
visual artist, writer

**Robert Kohr**  
associate animation director,  
Nickelodeon On Air

**Wilfried Laforge**  
research associate, Institut  
Acte/CNRS, Panthéon-  
Sorbonne University

**Sonnye Lim**  
animator

**Jasper Lin**  
animator, computer artist,  
programmer

**David B. Mattingly**  
matte artist, illustrator

**Adam Meyers**  
producer

**Nikita Mikros**  
game developer; chief  
executive officer,  
Tiny Mantis Entertainment

**Hsiang Chin Moe**  
filmmaker, artist, curator

**Ciaran Moloney**  
senior FX artist, The Mill

**Luis Rodrigo Navarro**  
new media artist

**Alex Noyes**  
sound designer; sound editor;  
re-recording mixer; owner,  
ReSound Post

**John Patterson**  
technical director

**David Peng**  
animator

**Casey Reuter**  
3D generalist

**Steve Rittler**  
animator, illustrator

**Federico Muelas Romero**  
new media artist

**Trilby Schreiber**  
designer, illustrator,  
writer, producer

**Rich Shupe**  
founder, president,  
FMA, New York

**Amresh Sinha**  
filmmaker

**Rory Solomon**  
educator, software engineer

**Paul Sultan**  
pipeline technical director,  
CHRLX

**Hans Tammen**  
deputy director, Harvestworks  
Digital Media Arts Center

**Jose Vargas**  
visual artist

**Angelica Vergel**  
media researcher,  
visual artist

**Ben Voldman**  
illustrator, animator

**Ada Whitney**  
co-founder, creative  
director, Beehive

## Lecturers, Mentors & Thesis Advisors

**Ignacio Barrios**  
senior character technical  
director, Blue Sky Studios

**Nitzan Bartov**  
game designer, architect

**John Canemaker**  
filmmaker, writer, animator,  
animation historian

**José Carlos Casado**  
multimedia artist

**Pete Docter**  
film director, animator,  
screenwriter, producer

**Ken Goldberg**  
artist, writer, inventor,  
researcher

**Maria Lee**  
artist/shading artist, Pixar  
Animation Studios

**Golan Levin**  
artist, researcher

**Barbara London**  
curator

**Paul Miller (a.k.a. DJ Spooky)**  
DJ, artist, writer

**Mark Osborne**  
film director, writer, producer,  
animator

**Carol Parkinson**  
executive director,  
Harvestworks

**Jan Pinkava**  
director, writer, animator

**Bill Plympton**  
animator, graphic designer,  
cartoonist





# Application Process

## APPLICATION REQUIREMENTS

For a full list of application requirements and detailed instructions, visit:

[sva.edu/grad/howtoapply](https://sva.edu/grad/howtoapply)

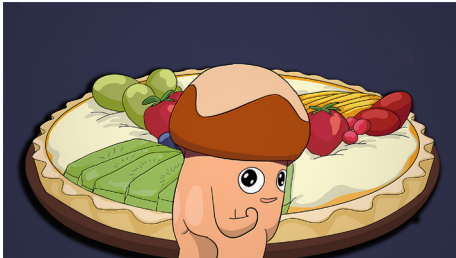
- Online Application and \$80 Application Fee: [sva.edu/apply](https://sva.edu/apply)

## DEADLINES

For information on application deadlines, visit: [sva.edu/grad/timeline](https://sva.edu/grad/timeline)

## IMPORTANT LINKS

- FAQ: [sva.edu/grad/faq](https://sva.edu/grad/faq)
- International students: [sva.edu/grad/intl](https://sva.edu/grad/intl)
- Tuition and fees: [sva.edu/tuition](https://sva.edu/tuition)
- Visit SVA: [sva.edu/grad/visit](https://sva.edu/grad/visit)



CLOCKWISE FROM TOP: Kaitlyn Fitzgerald, *Undying Love*, 2019;  
Yuan Ting Chao and Lei Tu, *Sweet Dreams*, 2019; Beau Bonnet,  
*ICU*, 2019; Yu Jian, *Today's Special*, 2019

# Contact Us

We encourage applicants to visit our department. Contact us directly to schedule a department tour or sign up to attend an Information Session. For more information and to register, go to: [sva.edu/grad/visit](http://sva.edu/grad/visit).

If you have any questions about the application process, contact Graduate Admissions at 212.592.2107 or email: [gradadmissions@sva.edu](mailto:gradadmissions@sva.edu).

**Terrence Masson**, chair

**Bruce Wands**, chair emeritus

**Angelica Vergel**, director of operations

**India Lombardi-Bello**, assistant to the chair

**Lotte Marie Allen**, academic advisor and curriculum coordinator

**Milos Paripovic**, senior systems director

**Darren Santa Maria**, AV systems administrator

**Rob Campbell**, systems administrator

**Tel:** 212.592.2778

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**Email:** [mfaca@sva.edu](mailto:mfaca@sva.edu)

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**Department Site:** [mfaca.sva.edu](http://mfaca.sva.edu)

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 **SVA turns out the best students because they have the most prepared skill set. That's why I recruit from there today."**

—Myung Lee, MFA 2004

## ACCREDITATION

The School of Visual Arts has been authorized by the New York State Board of Regents ([www.highered.nysed.gov](http://www.highered.nysed.gov)) to confer the degree of Bachelor of Fine Arts on graduates of programs in Advertising; Animation; Cartooning; Computer Art, Computer Animation and Visual Effects; Design; Film; Fine Arts; Illustration; Interior Design; Photography and Video; Visual and Critical Studies; and to confer the degree of Master of Arts on graduates of programs in Art Education; Critical Theory and the Arts; Curatorial Practice; Design Research, Writing and Criticism; and to confer the degree of Master of Arts in Teaching on graduates of the program in Art Education; and to confer the degree of Master of Fine Arts on graduates of programs in Art Practice; Art Writing; Computer Arts; Design; Design for Social Innovation; Fine Arts; Illustration as Visual Essay; Interaction Design; Photography, Video and Related Media; Products of Design; Social Documentary Film; Visual Narrative; and to confer the degree of Master of Professional Studies on graduates of programs in Art Therapy; Branding; Digital Photography; Directing; Fashion Photography.

The School of Visual Arts is accredited by the Middle States Commission on Higher Education ([msche.org](http://msche.org)), 3624 Market Street, Suite 2 West, Philadelphia, PA 19104, 267.284.5000. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The School of Visual Arts is an accredited institutional member of the National Association of Schools of Art and Design ([nasad.arts-accredit.org](http://nasad.arts-accredit.org)).

The Interior Design program leading to the Bachelor of Fine Arts in Interior Design is accredited by the Council for Interior Design Accreditation ([accredit-id.org](http://accredit-id.org)), 206 Grandville Avenue, Suite 350, Grand Rapids, MI 49503-4014.

The School of Visual Arts' Department of Art Education is currently pursuing accreditation of its educator preparation programs by the Association for Advancing Quality in Educator Preparation (AAQEP).

Pursuant to Section 52.21 of the Regulations of the Commissioner of Education, the educator preparation program offered by the School of Visual Arts is considered to be continuously accredited for purposes of meeting the New York State requirement that all such programs maintain continuous accreditation. The School of Visual Arts' Master of Arts in Teaching in Art Education program was previously accredited by the Council for the Accreditation of Educator Preparation (CAEP).

The Master of Professional Studies in Art Therapy degree program is approved by the American Art Therapy Association, Inc., and as such meets the education standards of the art therapy profession.

## CREDITS

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COVER: Doudou Liu, *Olive*, 2019



# School of Visual Arts

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