Shi Weili

Creative Technologist
Digital Media Artist

https://shi-weili.com
me@shi-weili.com
+1 (917) 969-6217

Shi Weili (surname: Shi, given name: Weili) has been creating interactive and immersive experiences for museums and cultural institutes since 2016. As a Senior Creative Technologist at G&A, he works closely with a diverse team of designers, developers, writers, and producers to apply cutting-edge technologies to meaningful human-computer interaction and effective storytelling. From concept design and prototyping to budget estimation and production, Shi participates in all stages of the creative process.

As a digital media artist, Shi creates unconventional experiences to provoke contemplation. While most of his artworks involve substantial use of technology, he always tries to infuse them with a dose of Zen mindfulness.

CREATIVE INDUSTRY EXPERIENCE

2023-present
G&A, New York—Senior Creative Technologist

2019-2023
Bluecadet, New York—Senior Developer

2016-2019
Bluecadet, New York—Developer

ACADEMIC EXPERIENCE

2021
University of Illinois Urbana-Champaign—Guest Lecturer
Presentation: *Applied Artificial Intelligence in Museum Experiential Design and Art Creation*

2020
SIGGRAPH 2020—External Reviewer
Reviewing submissions to the Art Papers track

2017
Monmouth University, New Jersey—Guest Lecturer
Presentation: *A Quest for Mindfulness—Creative Process*
Workshop: *A Crash Course in Creative Coding—Application of Randomness in Processing*

2016-2017
Parsons School of Design, New York—Adjunct Professor
Teaching graduate-level courses on creative technologies
Courses: *Currents: Coding with Cinder, Creativity & Computation Lab*

2011
Microsoft Research Asia, Beijing—Research Intern
Researching human-computer interaction technologies

2011
Tsinghua University, Beijing—Teaching Assistant
Course: *C++ Program Design Practices*

EDUCATION BACKGROUND

2014-2016
Parsons School of Design, New York—Master of Fine Arts
Major: *Design and Technology*

2010-2014
Tsinghua University, Beijing—Master of Engineering
Major: *Computer Science and Technology*

2003-2007
Huazhong University of Science and Technology, Wuhan—Bachelor of Engineering
Major: *Electronic and Information Engineering*

SELECTED CREATIVE TECHNOLOGY PROJECTS

2022
MIT Museum— *AI: Mind the Gap*
Role: Lead developer, Black Box and Collaborative Poetry
Technologies: Unity, HLSL, Tensorflow, GPT-3, GPT-2, TouchDesigner, Three.js, P5.js, React, Strapi
Award: blooloop Innovation Awards, third place in Experiential Technology

MIT Museum invites visitors to take part in on-going research and demonstrate how science and innovation will shape the future of society. As two key experiences in the museum's AI gallery, Black Box invites visitors to draw a face, and uses holographic spatial projection to visualize how a custom-trained neural network processes the face drawing layer by layer to identify its expression; Collaborative Poetry invites visitors to collaborate with an AI in writing a poem to show AI as a tool to unlock human creative expression.

2022
Christie's— *Visionary: The Paul G. Allen Collection*
Role: Lead developer
Technology: Unity

Achieving over $1.6 billion, the Visionary: The Paul G. Allen Collection auctioned at Christie's became the most valuable private collection in art history and the biggest sale in auction history. Bluecadet collaborated with Christie's to create a lobby exhibition at Rockefeller Center with an immersive LED wall and an interactive timeline to showcase the 150+ masterpieces spanning 500 years of artistic innovation.

2020
The Henry Ford Museum of American Innovation— *AI Connections Table*
Role: Developer, AI curation system
Technologies: Cinder, EntityX, Tensorflow, scikit-learn, SQLite
Awards: Anthem Awards, silver winner in Education, Art, & Culture, silver winner in Responsible Technology

The Henry Ford of Museum American Innovation wanted to give guests a peek into the sometimes messy, always interesting mind of a museum curator. The AI Connections Table marries curator-created concepts with surprising AI-driven discoveries, illuminating connections between over 30,000 objects across the museum's digital collection.

2019
W. L. Gore & Associates— *Capabilities Center*
Role: Lead developer, Immersive Corridor and Product Wall
Technologies: TouchDesigner, ELM, Houdini
Award: ABPM 2022 World Class Briefing Center

With motion-triggered lighting elements, the Immersive Corridor leads into the large central exhibition space of Gore and subtly introduces themes, materials, and visual effects that recur throughout the Capabilities Center. The Product Wall activates dynamic light trails to highlight products in a variety of industries as a powerful visualization of the scale and scope of Gore's work.

2019

Independence Visitor Center—*Concierge Wall*

Role: Developer
Technologies: Cinder, GLSL, OpenPTrack, openFrameworks, scikit-learn

As the gateway to Philadelphia's attractions, the Independence Visitor Center is an essential resource for tourists exploring the city. The 42-foot multi-user touch wall dynamically responds to visitors' presence, surfacing the city's attractions in fun and beautiful ways.

2019

The Henry Ford Museum of American Innovation—*Interpretation Column*

Role: Lead developer
Technologies: Cinder, GLSL, openFrameworks

The Agriculture and the Environment interpretation column transforms an infrastructural element into new interpretive surfaces. It offers two large-scale touch surfaces that explore the exhibit's key themes through the lives and work of Rachel Carson, George Washington Carver, and Luther Burbank.

2018

MIT Museum—*Lighter, Stronger, Faster: The Herreshoff Legacy*

Role: Lead developer, Collection Visualizer
Technologies: Cinder, GLSL
Award: MUSE Design Awards, silver winner in Architectural Design—Pop-Ups & Temporary

The MIT Museum's exhibition Lighter, Stronger, Faster charts the prolific work of marine technologist and innovator Nathanael Greene Herreshoff. Our Collection Visualizer allows visitors to quickly see key innovation moments and highlights from Herreschoff's 75-year career through exploring a fully scalable timeline of more than 10,000 blueprints and documents.

SELECTED ART PROJECTS

2019

Terra Mars **Series**

Artistic renderings of Mars and Earth with visual reference to each other made with custom AI models trained with topographical data and satellite imagery of the two planets.

Exhibitions:

- Compass – *Navigating the Future.* Beginning May 27, 2019. **Ars Electronica Center**, Linz.
- "*Weather the Weather*" *a SciArt Initiative exhibition at the* ***New York Hall of Science****.* September 10, 2019—January 10, 2020.
- *The 5th Art and Science International Exhibition and Symposium.* November 2-30, 2019. **National Museum of China**, Beijing.
- *SUBMERGE.* December 15, 2019—January 31, 2020. **Science Gallery Bengaluru.**
- ***Shenzhen Bay STArts Festival****—the Final Prophet*. December 26, 2020—January 26, 2021. MixC Shenzhen Bay.
- *Art: Key to Conflict Resolution*. June 27—July 27, 2022. **Municipal Art Gallery**, Thessaloniki.
- ***FILE – Electronic Language International Festival***. July 13—August 28, 2022. Galeria de Arte do Sesi, São Paulo.

Also see related academic publications and media coverage.

2016

Shan Shui in the World

Shanshui (landscape) paintings of selected places in the world generated by a computational process based on geo-data.

Exhibitions:

- *BETWEEN SPACES: Parsons MFA Design + Technology Class of 2016 Thesis Exhibition.* May 17—21, 2016. **Parsons School of Design**, New York.
- *Overfitting*. August 26-28, 2016. **Ouchi Gallery**, New York.
- ***NYC Media Lab 16***. September 22, 2016. Columbia University, New York.
- *Metamorphoses: VISAP'16, the **IEEE VIS** Arts Program*. October 23-28, 2016. Baltimore Convention Center, Baltimore, MD.
- *Digitalia*. March 18-April 15, 2017. **Barrett Art Center**, Poughkeepsie, NY
- *Art: Key to Conflict Resolution*. July 17-31, 2019. **Serafio**, Athens.
- *Art: Key to Conflict Resolution*. June 27—July 27, 2022. **Municipal Art Gallery**, Thessaloniki.

Also see related academic publications and media coverage.

ACADEMIC PUBLICATIONS

2020

Elizabeth L Murnane, Xin Jiang, Anna Kong, Michelle Park, Weili Shi, Connor Soohoo, Luke Vink, Iris Xia, Xin Yu, John Yang-Sammataro, Grace Young, Jenny Zhi, Paula Moya, James A Landay. *Designing Ambient Narrative-Based Interfaces to Reflect and Motivate Physical Activity*. **CHI 2020, Honolulu.** Won **Best Paper Award** in CHI 2020.

2019

Weili Shi. *Terra Mars: When Earth Shines on Mars through AI's Imagination.* **Leonardo**, Vol. 52, Issue 4. Presented in **SIGGRAPH 2019**, Los Angeles.

2017

Weili Shi. *A Generative Approach to Chinese Shanshui Painting*. **IEEE Computer Graphics and Applications**, Issue No. 01—Jan.-Feb. (vol. 37).

2016

Weili Shi. *Shan Shui in the World: A Generative Approach to Traditional Chinese Landscape Painting*. **IEEE VIS 2016 Arts Program**, Baltimore.

2013

Weili Shi, Weidong Liu, Jiaxing Song. *Stentorian MAC: Enhance Concurrency in Underwater Acoustic Sensor Networks.* **19th Asia-Pacific Conference on Communications**, Bali.

2011

Weili Shi, Yuanchun Shi, Weidong Liu. An Execution Oriented Way to Organize Personal Activity. Information. **7th Joint Conference on Harmonious Human Machine Environment**, Beijing. (In Chinese)

SELECTED MEDIA COVERAGE

2021
- *Relative boundaries*. Interviewed by **Shenzhen Bay STArts Festival**.

2020
- *When water speaks*. **Business Standard**.
- *IEEE VIS 2016 and 2017 Arts Program Gallery*. **Leonardo**.

2019
- *Behind 'Terra Mars' With Weili Shi*. Interviewed by **ACM SIGGRAPH Blog**.
- *Terra Mars – ANN's topography of Mars in the visual style of Earth.* **Creative Applications Network**.

2018
- Interviewed in book ***Can Art Aid in Resolving Conflicts?: 100 Perspectives*** by Noam Lemelshtrich Latar, Jerry Wind, and Ornat Lev-er. Frame Publishers.
- Featured in text book ***Cartography*** by Kenneth Field. Esri Press.

2017
- *Innovative Creator and Technologist Weili Shi To Speak At Monmouth University*. September 27, 2017. New Jersey Stage.

2016
- *Shi Weili—Generative Shanshui Paintings Based on Geographic Information*. Interviewed by **OF COURSE**. (In Chinese)
- *His Thesis is a Shanshui Painting of Manhattan, New York Generated By Code*. Interviewed by **QDaily**. (In Chinese)
- *'Observe the Heart' Creates Beautiful Visuals from Meditating Brains*. **MindFullyAlive**.