I am applying for the Fine Arts Creative Research Grant to support two innovative projects, "Under the Tongue" and "Carbon Farm." These projects are integral to my first major museum solo exhibition scheduled for January- March 2024.

1. Under the Tongue

Project description:

"Under the Tongue" is an advanced speech-to-video generative AI system transforming spoken words into visually emotive videos. It analyzes the emotional tone of speech, converting it into a corresponding visual narrative. For instance, a political debate's intensity could be visualized in a dynamic comic book style with exclamation bubbles. News coverage of serious topics like war would evoke a somber black-and-white palette, capturing the gravity of the situation. Conversely, happy conversations would lead to bright and colorful videos. The video captures both the content and the underlying emotion beyond the words.

Upon entering the installation, participants press a button and start talking on the microphone. They could have a conversation, a monologue, a debate, a story game, a speech, a confession, etc. The Al then creates a short video representation of their speech on six TV sets.

Outcome and Impact:

The interactive installation will be exhibited in my first major museum solo exhibition in China in January-March 2024. Besides the installation, I will host Story Game events. Each participant says a sentence in consecutive to the last person, collectively we create a story together. And these stories will be turned into films as we speak.

The next phase will see "Under the Tongue" evolve into a web-based tool, accessible globally for creating Al-generated films from spoken narratives. This project made it possible to quickly create Al-generated film by simply talking about the film. "Under the Tongue" could be a tool to create highlight reels from brainstorming sessions. The system also shows how easy and fast it can be to create videos for fake news.

Screenshots from the current prototype:



Left: screenshot of the video when the AI listens to a cooking TV show Right: screenshot of the video when the AI listens to a live air show



Screenshot of the video when the Al listens to the News



Left: screenshot of the video when the AI listens to the Republican Party presidential debates Right: screenshot of the video when the AI listens to an intense conversation in a bar

2. Carbon Farm

Project description:

Contribute the CO2 from your breath and speech to our Carbon Farm. We transform it into nourishment for thriving algae cultures. These algae are then processed into bioplastics. A bioplastic uniquely made from your breath.

Speak or breathe into our specialized CO2 collector. For those who wish to articulate their thoughts, we provide a range of prompts: excerpts from the Paris Climate Accord, highlighting our critical mission to limit temperature rise to 1.5°C within the next seven years; examples of corporate greenwashing with their catchy yet hollow phrases; or a space for personal confession on your carbon footprint. In real-time,

you will see how much CO2 your breath or speech is emitting and how much algae can grow out of it. Our advanced carbon sequestration system will then take your CO2 through heating, spinning, bathing in chemicals, and finally turning it into nutrition for the algae.

We harvest this algae regularly, converting it into eco-friendly, degradable bioplastics. In recognition of your contribution, you will receive a personalized algae bioplastic badge, a symbol of your commitment to a greener future.

Moreover, our Carbon Farm also nurtures Spirulina, a nutrient-rich algae. This edible variant of your contributions is transformed into delectable culinary creations, served during our unique dining performances. It's a full-circle experience: your words and breath, transformed into nourishment, return to sustain you.

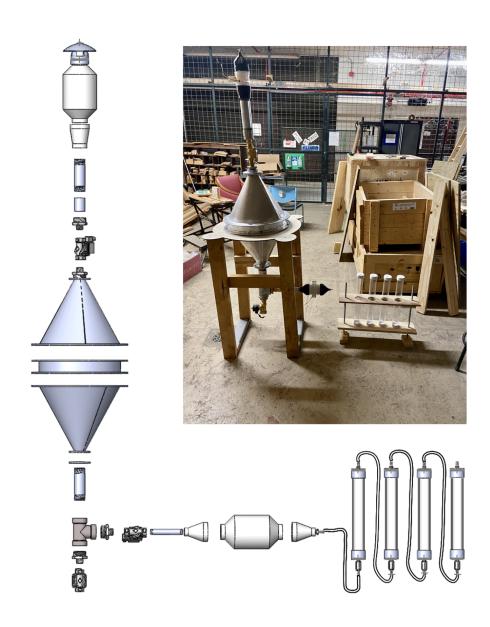
Outcome and Impact:

The interactive installation will be exhibited in my first major museum solo exhibition in China in January-March 2024. And at the annual showcase of my Ecocentric Future Lab works at Tyrell Gallery with Fusebox Festival. It will also be exhibited as a featured series of my works at Ars Electronica in Linz, Austria, the prestigious technology art festival.

By contributing their CO2 to the Carbon Farm, participants are invited to reflect on their relationship with non-human living systems, the planet, the atmosphere, and their individual impact on climate change.

Beyond its artistic value, the Carbon Farm serves a practical purpose as a household-scale carbon sequestration unit. Similar to the widespread adoption of rain catchers, the Carbon Farm could be implemented in homes to capture atmospheric CO2, converting it into edible algae-based snacks.

However, it's important to note that carbon sequestration, in its current form, is not a comprehensive solution to climate change. For perspective, one would need to breathe into the Carbon Farm for an entire week to offset the carbon footprint of a cross-country flight in the United States.



Prototype of the carbon sequestration apparatus, work-in-progress. The final installation will contain six 5-foot-tall algae culture tubes. We will use a different material for the bottom stand. And the overall aesthetics will be much more elegant.

External Funding received:

Planetary Texas \$8,000 Jerome Hill Artist Alternate award grant \$10,000

FINE ARTS CREATIVE RESEARCH GRANT BUDGET PROPOSAL

INSTRUCTIONS: Identify the specific amount requested from this program and what it will be used for by itemizing each estimated expense.

(PENSE DESCRIPTION (i.e. equipment purchase, ompanist fee, printing fees, supplies, book subvention, praria, business contract, wages, etc.)	AMOUNT
Cloud server time	\$2,000.00
Google Collab fee	\$300.00
Installation expenses	\$2,000.00
Equipments, materials, electronics, chemicals	\$2,500.00
Summer stipend for the month of June 2024	\$3,000.00
Algae strains	\$200.00
otal	\$10,000.00

JIABAO LI

www.jiabaoli.org stephlijiabao@gmail.com

Education

2016-2018 HARVARD UNIVERSITY, Cambridge, MA

Graduate School of Design, Master of Design in Technology

Distinction & Thesis Prize, GPA 5.0/5.0

Advisors: Panagiotis Michalatos, Krzysztof Wodiczko, Allen Sayegh

MIT, Cambridge, MA MIT Media Lab, GPA 5.0/5.0 Research, Cross-registration

Advisor: Sputniko!

2011-2015 NATIONAL UNIVERSITY OF SINGAPORE, Singapore

Bachelor of Electrical & Computer Engineering, Distinction Honors

2018 ROYAL COLLEGE OF ART, London, UK

Contemporary Art Practice

2014 RWTH AACHEN UNIVERSITY, Aachen, Germany

Human-Computer Interaction

Professional Experiences

2021-present Assistant Professor (Tenure Track)

University of Texas at Austin, College of Fine Art
+ Founding director of <u>Ecocentric Future Lab</u>
+ Courtesy Appointment at School of Information

Appointed as fellow to the Effie Marie Cain Regents Chair in Fine Arts with research funding; Chair of the public speaker series, invited speakers like Paola Antonell, Lynn Hershman to our department; Search committee on cross-disciplinary tenured Full Professor in Expanding Approaches

to American Arts; Multiple research awards winner

2021-present NEW INC, New Museum, ONX Studio, New York

Artist member, Creative Science

Mentor: Fiona Raby, Supported by Science Sandbox, Simons Foundation

2022-present Co-founder, Endless Health

Test, train, track for cardiovascular and metabolic health assisted by AI

2020-2022 Co-founder, Snapi Health

Baby microbiome testing assisted by AI

2018-2021 <u>Apple</u>, Cupertino Apple Park

Digital Media Artist, Designer, Prototyper

Explore future 5-10 years of new technology and new product development;

Invent numerous future products and awarded multiple patents;

Shipped products include Apple Vision Pro, Mental Health, iPad Pencil Scribble, LiDAR Scanner,

ECG on Watch, iPhone Handwriting;

Give a talk on "Discoverable Design" at Apple's Worldwide Developers Conference WWDC

2022-2023 Tencent, Shenzhen, China

Creative Director, Consultant

Work with Tencent Sustainable Social Value initiative to use technological innovations to improve

the lives of billions of people.

Directed art exhibitions on ocean ecology, climate change, AI archeology.

Speaker of Tencent Design Week

2022-2023 IDSA, D&AD, SIGGRAPH, Biodesign Challenge

Jury, Education Council

2017-2018 HARVARD UNIVERSITY, Cambridge, MA

Teaching Fellow

With Krzysztof Wodiczko for the course Public Projections: Projection as a Tool for Expression and

Communication in Public Space;

Teach workshops on projection mapping techniques, electronics, animations, programming,

fabrications, video editing, and making interactive prototypes;

Moderate design critiques and art studios

2015-2016 SEA, Singapore

Creative Director

Awards

2023 <u>Outstanding Instructor Award</u>

By Biodesign Challenge held at MoMA

2022 <u>Forbes China 30 Under 30</u>

2023 Jerome Hill Artist Fellow

Technology Centered Arts

2023 PlanetTexas 2050 Grant

2023 Core 77, Speculative Design Award

2022 Cannes World Film Festival, Best VR Short Winner

2022, 2023 Webby Award

Four Nominations in Viral, NetArt, Art & Experimental, Immersive

2022 Raindance Film Festival

Nominations: Best Immersive Experience Best Immersive Experience for Social Impact

Discovery Award: Best Debut

2022 Rasmuson Foundation, Individual Artist Award

2021 All American Chinese Youth 30 Under 30

2022 World Film Carnival Winner

2021 Effie Marie Cain Regents Chair in Fine Arts Fellowship

2021 A' Design Award, Silver

2021 STARTS in Motion

Falling Walls Berlin Winner, Art and Science

2021 STARTS Prize, Nomination

2021 Fast Company World Changing Ideas Award, Finalist and Honorary Mention

2021 IDEA Award in Medical & Health

2021 Femme Futures Grant, Artizen

2020 National Endowment for the Arts NEA

Artists Accessing Scientific Labs: Center for Mind and Brain

2020 STARTS Prize

Honorary Mention

2019 Core77 Design Award

Winner in Built Environment

2019 Fast Company World Changing Ideas Award

2019 IDSA Award

Featured Finalist in Furniture & Lighting

2018 IF Design Award

Winner in Lighting system

2018 International Symposium on Wearable Computers Design Award

2018 Harvard Best Thesis Prize

Awarded by the faculty of the Harvard Graduate School of Design

2017 First Place, CHI Play Game Design

2017 First Place, Cities for a Flying World

International competition launched by Shukhov Lab

2016 First Runner-up, MIT Hacking Art

2016-2018 Harvard International Student Scholarship

2015 NUS Innovation & Research Award

2011-2015 Science & Technology Undergraduate Scholarship

Exhibitions

Solo Exhibitions

2023 Ecological Soup: Interspecies Encounters

Currents New Media, Santa Fe, NM

Perception Omnifold

Yang Family Art Gallery, Indianapolis, IN

OCAT Contemporary Art Terminal, Shenzhen, China

Duande Art Museum, China

Selected Group Exhibitions

2023 Time Space Existence, Transpecies Design

Venice Architecture Biennale, European Culture Center

Bio Design Challenge

Museum of Modern Art (MoMA), New York

To Your Eternity, Curator: Xin Wang 致不灭的你

Today Future Biennale, Beijing

Observing Animals and Nature Exploratorium, San Francisco

Sea Life

Exploratorium, San Francisco

World Wide Web. Of Life Exploratorium, San Francisco

Let's Entertain: Game in Metaverse 失控乐园

Times Art Museum, Chengdu

Squeeker: The Mouse Coach

IDFA DocLab: Phenomenal Friction, Flemish Cultural Center de Brakkle Grond, Amsterdam

Once a Glacier, XR Experience

SXSW, Austin

Time Capsules: Discovering The Undiscovered

SIGGRAPH Art Gallery, Los Angeles

Symbiosis, International Symposium on Electronic Art

Forum des images, Paris

ART*VR

Contemporary art DOX, Prague

Entangled Intelligence, Curator: Jiabao Li

Fusebox Festival, Tyrell Gallery, Austin

Taboo Transgression Transcendence, Malta Society of Arts

Ocean House Co-creation, Shenzhen 海洋屋共创展

ChinaVIS, Chengdu

Hammer Museum, Los Angeles

Embodied Ecology New Museum, New York

Under, Over, Through New Lab x New Museum, New York

Nervous Systems, Amsterdam ONX + IDFA DocLab MoCap Stage

Bodies Odors Trauma Disease Olfactory Art Keller, New York

Raindance Film Festival, London

Festival de Cortos de Bogotá, Columbia

Cryosphere EPOCH Gallery

Possibles, International Symposium on Electronic Art Centre de Cultura Contemporània de Barcelona, Barcelona

SIGGRAPH Art Gallery, Vancouver

NYC Climate Week

CHI, New Orleans

SXSW, Austin

IEEE VIS Art, Oklahoma City

A New Digital Deal

Ars Electronica, Linz, Austria

MOOD Museum of Design, Como, Italy

Do Not Black Out 不准停电

McaM Ming Contemporary Art Museum, Shanghai

Anchorage Museum

Gone with Ice

Alaska State Museum

Dynamic natural connections

Artists in Nature International Network

Global Just Recovery Gathering

IEEE VIS Art, Salt Lake City

In Kepler's Gardens 2020

Ars Electronica, Linz, Austria

2021

Let This Moment Be Transformative 那些...日子 OCAT Contemporary Art Terminal, Shenzhen

Post-pandemic Contemporary Art Exhibition 不确定:珠三角当代后疫情展 Ox Warehouse Gallery, Macao

Donghu Shan Art Museum, Wuhan

Broto Art-Climate-Science

Affinity

2019 Milan Design Week, Ventura Future

SIGGRAPH Art Gallery, Los Angeles

Lux Aeterna, International Symposium on Electronic Art Asia Culture Center, Gwangju, South Korea

Space, Art+Tech Festival Codame, San Francisco

CHI, Glasgow

Futures For All Primer, New York

2018 Dubai Design Week, Global Grad Show

Johnson Gallery, London

Kirkland Gallery, Boston

Harvard Art Show

<u>Talks</u>

2019 <u>TED Talk</u>

Art That Reveals How Technology Frames Reality

2022 <u>TEDxBoston</u>, Planetary Stewardship

Interspecies Co-Creation

2023 SXSW

Animal Influencers as a Way Out of Climate Fatigue
Data Art as Time Capsule of the Anthropocene

2019 TEDxBeaconStreet

How Technology Mediates the Way We Perceive Reality

2021 Apple WWDC Talk

Discoverable Design

2023 Tencent Design Week

How Art and Design Give Voice to Health Issues

Today Art Museum 2023 To your eternity: Transpecies Co-creation Exploratorium 2023 Art & Science Collaborations X Museum, X Virtual 2023 How co-creation with squid, octopus, and glaciers taught me ecocentric worldviews Scents of Time: Olfactory Tales from Inner Blossoms to Outer Ice 2023 Osmocosm Imagining Infinite Futures: AI in Art and Design 2023 Good Systems Artificial Intelligence and the Creator's Dilemma 2023 Consensus 2023 Aesthetics and Empowerment IFIP International Conference on Entertainment Computing New Museum 2022 **Embodied Ecology** Tencent Design Week 2022 Eco-Centric Design Google UX Conference 2022 Interspecies Co-creation Shrem Museum 2023 Artist Scientist Conversation Women in Computer Graphics 2023 **SIGGRAPH** Menstrual Garden 2023 Biohack the Planet Creative Santa Fe 2022 Interspecies World Sharing 2022 Transpecies Design Symposium Women in Data Science 2022 Cyber Attack, Digital Art and Activism 2022 XR Technology and New Directions in Physical Performance and Media Artists on Exile 2022 Exiland Science, art, and the smell of menstruation 2022 Olfactory Art Keller MuseumNext, XR Summit 2021

The Future of Online Art Exhibitions

2021 Anchorage Museum, Alaska State Museum

Gone with the Ice

2021 American Geophysical Union

Building Quantitative Literacy Through Science, Education, and Art

2020 LASER Talk

Online Art for the Age of Plague

2020 B4bel4b Gallery

Artist Panel for 女 Nǚ: Other Half of The Sky

2020 Idle Away Speculative Caricature

Hosts: Sputniko! and Hazumu

2020 Stanford University

Art as a Form of Activism

2019 International Symposium on Electronic Art

TransVision, Twinkle, Diffusive Geometry

2019 Binary Salon

2018 AR in Action

Keynote speaker, Panel: Art and Design in the Built Environment, Buildings as User Interface

2016 China VR & AR International Summit

Keynote speaker

Patents

Devices, methods, and graphical user interfaces for tracking mitigation in three-dimensional

environments

2020 Handwriting Entry on Electronic Device

2020 Keyboard Management User Interfaces

Artist in Residence

2023 Ars Electronica, Founding Lab Fellow, IDSA

2024 The Arctic Circle

2022 NEA-funded Artists Accessing Scientific Labs

Center for Mind and Brain at UC Davis

202I <u>NEW INC</u>

New Museum, Creative Science

2022 ONX Studio

2022 Rasmuson Foundation

2021 Anchorage Museum

Seed Lab

2021 STARTS in Motion

2021 Artists in Nature International Network

Selected Lectures

2020, 2021, 2022, Harvard Graduate School of Design

2023 Responsive Environments, MDes Mediums Thesis Seminar, Host: Allen Sayegh

2023 Kyoto University

Interspecies Co-creation, Host: Tosa Naoko

2023 Ars Electronica

IDSA FOUNDING LAB: University of the Futures

2023 Indiana State University

Perception Omnifold, Host: Tanmaya Bingham

2023 SPARKS

ACM SIGGRAPH Digital Arts Community

2023 Frog Design x BMW

Future of mobility

2022 Columbia University

Eco-centric Futures, Host: Gal Nissim

2020 Stanford University

Online Art for the Age of Plague, LASER Talk. Host: Piero Scaruffi

2021 University of Southern California

Aesthetics of Form, Host: Lisa Krohn, Carsten Becker

2021 Carnegie Mellon University

2021 University of Connecticut

Host: Sue Huang

2019 China Central Academy of Fine Arts CAFA

Smart City Lecture Series, Hosts: Song Xiewei, Jing Siyang

2020 UC Davis

Part of NEA Art Works Project, Hosts: Katia Vega, Jiayi Young

2020 University of Hawaii

MFA Seminar, Host: Mary Babcock

2020 San Jose State University

Speculative Futures: Climate, Pandemic, and Technology

Hosts: Alena Sauzade, Natalie and James Thompson Art Gallery, Yoon Chung Han

2021 Syracuse University

Host: Rebecca Ruige Xu

Publications, Books, Exhibition Catalogs

Google Scholar

2023	Book: Transpecies Design (in print) Contributing author for the essay Entangled Intelligence: Transpecies Dialogues of Art
2023	Book: Provocations on Media Architecture Contributing author for the essay How does media architecture distribute suspicion and trust?
2023	Book: Dimensions. Digital Art since 1859 Contributing artist for Cryosphere, Once a Glacier, Glacier's Lament
2023	Book: Death, Grief and Loss in the Context of COVID-19 Contributing artist for Unfinished Farewell
2023	Journal: Interactions, ACM, Exhibit X, January 2023 Unfinished Farewell
2023	SIGGRAPH Chthulucene
2023	Symbiosis ISEA Squid Map
2023	Taboo, Transgression, Transcendence in Art & Science Bloody BioFeminism
2023	China VIS Shifting Winds
2022	SIGGRAPH Glacier's Lament
2022	CHI Unfinished Farewell
2022	IEEE VIS AP Shifting Winds
2022	ISEA Glacier's Lament
2022	DiVA Glacier's Lament
2022	ACM Symposium on Computational Fabrication Bubbling Up Form from Data: A Nature-Inspired Form Generation Tool
2021	SIGGRAPH Unfinished Farewell

IEEE VIS Art 2021 Glacier's Lament IEEE VIS Art 2020 Unfinished Farewell Book: TransVision 2019 Journal: Leonardo, SIGGRAPH, Special issue 2019 TransVision: Exploring the States of the Visual Field in the Age of Extreme Augmentation CHI 2019 Hypercept: Speculating the Visual World Intervened by Digital Media Lux Aeterna ISEA 2019 TransVision, Twinkle, Diffusive Geometries DiVA 2019 TransVision: Exploring the States of the Visual Field in the Age of Extreme Augmentation DIS 2019 Diffusive Geometries: Vapor as Tectonic Element to Sculpt Microclimate in Architecture Journal: Domus, Innovation, March 2018 2018 Twinkle: A Flying Lighting Companion for Urban Safety **ISWC** 2018 TransVision: Exploring the States of the Visual Field in the Age of Extreme Augmentation TEI 2018 Twinkle: A Flying Lighting Companion for Urban Safety IEEE VIS, TVCG 2018 DXR: A Toolkit for Building Immersive Data Visualizations CHI Play 2017 CatEscape: An Asymmetrical Multiplatform Game Connecting Virtual, Augmented and Physical World CHI Play 2017 MagicTorch: A Context-aware Projection System for Asymmetrical VR Games Book: Setting the Table, Platform 11, Harvard 2018 Contributing artist for Twinkle, Beach, Her Book: Live Feed, Platform 10, Harvard 2017 Contributing artist for TransVision: Exploring the States of the Visual Field in the Age of Extreme Augmentation Nature Journal: Scientific Reports 2014 Laser Hybrid Micro/nano-structuring of Si Surfaces in Air and its Applications for SERS Detection 2014 Journal: Nanotechnology High aspect ratio SiNW arrays with Ag nanoparticles decoration for strong SERS detection

Subject: Congratulations!

Date: September 15, 2023 at 12:18 AM
To: Li, Jiabao jiabao.li@austin.utexas.edu

Cc: samantha.pinto@utexas.edu, Dawson, Kathryn M kathryndawson@mail.utexas.edu

Dear Jiabao,

Thank you very much for your submission to Planet Texas 2050's open call for arts, design, and humanities collaborators, in partnership with the Humanities Institute. Our committee enjoyed learning more about you, your research and creative work! **We're excited to offer you support for the full requested amount of \$8,000 and a role within our new collaborative cohort and faculty learning community.**

The grant pool was competitive; we were thrilled with the number and quality of proposals we received and are able to offer this support to just 20% of applicants. Your proposal stood out because of its scholarly and creative merits and because of your demonstrated capacity for and commitment to interdisciplinary collaboration.

As noted in the call details, the new cohort will be expected to participate in a series of facilitated work sessions designed to catalyze collaboration across the cohort as well as with the broader PT2050 network. The schedule for this year's meetings will look something like below (with most dates still TBD). We'll talk about individual research goals and co-create specific shared objectives for this academic year in our first couple of cohort meetings.

- Early October: (75 min) introductory zoom meeting with new cohort participants
- Late October, TBD: first in-person cohort meeting
- · Friday, November 3rd, 2-5 p.m.: PT2050 Fall Researcher Meeting + Social Event (larger group of PT2050 participants)
- TBD Early December/January: Collaborative creative research mixer
- February 27-29, 2024 (afternoons): PT2050 Symposium Dates
- · TBD: April/May meetings

Please let us know if you have any questions and respond to this email by 9/20 to accept the award. Thank you again for your time and efforts, we're looking forward to working with you!

Planet Texas 2050 and the Humanities Institute

Heidi Schmalbach, PhD (she/her) I Director, Planet Texas 2050

The University of Texas at Austin | Office of the Vice President for Research, Scholarship and Creative Endeavors



550 Vandalia St., Suite 109 Saint Paul, MN 55114 651.224.9431 info@jeromefdn.org

JEROMEFDN.ORG

December 12, 2022

Grant #25094621

Jiabao Li 242 Broome St, 7C New York, NY 10002

Dear Jiabao Li:

On behalf of the Directors of the Jerome Foundation, we are pleased to share that you have been recommended to receive a Jerome Hill Artist Alternate grant. Alternates receive a one-time grant of \$10,000 to support self-determined activities for creation and presentation of new work, artistic development and/or professional artistic career development.

We ask you to sign this letter confirming your intent to accept the grant. **If for any reason you wish to decline this grant,** please immediately contact Andrea Brown (abrown@jeromefdn.org or 651-925-5615).

Once the Foundation has received all letters confirming intent to accept from all prospective grantees, we will announce the recipients on our website and in a press release. Please be advised that you may not publicly disclose this grant (including but not limited to social media posts or press releases) before the Foundation makes this announcement.

We are excited that the 2023 panelists recommended you for this award and look forward to the road ahead.

With all best wishes,

Ben Cameron President

bcameron@jeromefdn.org

Eleanor Savage Program Director

esavage@jeromefdn.org