[eric nai-li chen]

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Education

Cornell Tech — Starting Sep 2026
Ph.D. in Information Science
Advisors: Max Kreminski, Thijs Roumen

Brown University — Sep 2023 – May 2025
M.S. in Computer Science
Advisor: Jeff Huang

UCLA — Sep 2018 – Jun 2023
B.S. in Computer Science & Minor in Mathematics
GPA: 3.84

Research Experience

Boston University, Visiting Researcher — Boston, MA
Mentor: Chang Xiao — Jan 2026 – Present

Adobe, Research Intern — San Jose, CA
Mentors: Li-Yi Wei, Rubaiat Habib Kazi — Jun 2025 – Sep 2025

- Designed the Actionbrushes interaction model for authoring elemental dynamic effects with a generative brush-and-palette interface

Brown HCI Lab, Research Assistant — Providence, RI
Advisor: Jeff Huang — Feb 2024 – May 2025

- Designed and built L.ink: an L-system-based drawing tool empowering artists to create animated organic structures with a single stroke
- Conducted 12-participant user study investigating how the combination of controllability and surprise impacts creative process and workflow

NASA Academic Mission Services (USRA), Data Science Intern — Mountain View, CA
Mentors: David Bell, Aditya Das, Milad Memarzadeh — Jun 2020 – Sep 2021

- Led multi-organizational project creating wildfire machine learning models in collaboration with Civil Air Patrol captain, NASA research scientist, and USRA RIACS Director, presenting findings in 3 first-author posters at NASA Ames research symposium

Publications

CONFERENCE PAPERS

L.ink: Procedural Ink Growth for Controllable Surprise (DOI)
ACM UIST 2025
Eric Nai-Li Chen, Joshua Kong Yang, Jeff Huang, Tongyu Zhou

EXTENDED ABSTRACTS AND PICTORIALS

Actionbrushes: Painting with Elemental Dynamics from a Generative Palette (DOI)
CHI EA 2026
Eric Nai-Li Chen, Rubaiat Habib Kazi, Li-Yi Wei

L.ink: Illustrating Controllable Surprise with L-System Based Strokes (DOI)
CHI EA 2025
Eric Nai-Li Chen, Tongyu Zhou, Joshua Kong Yang, Jeff Huang

Invited Talks

Continuous Creative Channels Between Artist and Medium

UCSD Design Lab Seminar (host: Zhicheng Huang) — Oct 22, 2025

Guest Lecture for CS 598X1: HCI & HAI at Boston University (host: Prof. Chang Xiao) — Mar 24, 2026

Academic Service

Conference Reviewer

2026: CHI Posters, ACM C&C, ACM DIS (x2)
2025: CHI Late-Breaking Work
Special Recognition for Outstanding Reviews: DIS 2026

Selected Projects

SplatBrush: XR Painting with 3D Gaussians — CSCI 2951-I: Computer Vision for Graphics and Interaction

- Designed WebXR palette and brush interface for interactive 3D painting with Gaussian textures optimized from real-world materials
- Gathered multi-view material dataset using custom capture ring

Differentiable Rendering of Signed Distance Fields — CSCI 2240: Advanced Computer Graphics

- Implemented the method of Wang et al., *A Simple Approach to Differentiable Rendering of SDFs*
- Produced animated visualizations of gradient descent in action by optimizing scene parameters including lights, materials, object transformations, and freeform geometry

Video Analogies — CSCI 1290: Computational Photography

- Implemented patch-based style transfer from images to videos, extending Hertzmann et al., *Image Analogies*

Skills

Languages: JavaScript/TypeScript, HTML/CSS, C/C++, Python

Technologies: React, Three.js, OpenGL, TensorFlow, Express, Flask

Other: Public speaking, Leadership, 4th Degree Black Belt and ATA Taekwondo World Champion