

TYLER VARACCHI

Curriculum Vitae | Teaching & Research in Digital Media

tylervaracchi@gmail.com | 203-321-5167 | tylervaracchi.com | github.com/tylervaracchi | linkedin.com/in/tyler-varacchi | [ORCID: 0009-0004-1680-0464](https://orcid.org/0009-0004-1680-0464)

EDUCATION

Master of Science in Digital Media | Drexel University, Westphal College of Media Arts & Design | Dec 2025

Thesis: "AI-Powered Storyboard to 3D Scene Generation: A Comparative Analysis of Vision-Language Models for Iterative Positioning in Unreal Engine."

Advisor: Prof. Emil Polyak · Committee: Prof. Tony Rowe, Prof. Michael Wagner · GPA: 3.97/4.0

Bachelor of Arts in Studio Art | University of Vermont, College of Arts & Sciences | May 2022

Minors: Applied Design; Ecological Agriculture.

TEACHING & INSTRUCTIONAL EXPERIENCE

Guest Lecturer, 3D Modeling & Animation; Digital Storytelling | University of Vermont | Fall 2023 – Winter 2024

- Taught 3 sections of ~18 students each, in person and online; many students had no prior digital art experience. Designed units around hands-on iteration (prototype, critique, revise); every enrolled student finished with portfolio-ready Unreal Engine 5 work.

Teaching Assistant, 3D Modeling & Animation | University of Vermont | Jan 2022 – Jun 2022

- Delivered technical instruction in Maya and UE5 across 2 sections (~18 students each); led critiques, portfolio reviews, and career advising; managed materials in Blackboard; used the maker lab (3D printers, laser cutters) for student fabrication projects.

Teaching Assistant, Photography | University of Vermont | Aug 2020 – Jan 2021

- Supported instruction across 3 sections; maintained the darkroom, digital equipment, studio space, and light-sensitive materials.

Professional Training & Mentorship | SuperPlastic, 2022 – 2023; Studio Zubio, 2026

- Trained and onboarded 5 artists through a studio-wide pipeline transition with weekly skill sessions and direct critique; trained 2 artists on the motion-capture pipeline; trained Studio Zubio animators on custom animation and retargeting systems they now maintain.

PROFESSIONAL EXPERIENCE

Technical Animator (Contract) | Studio Zubio | Feb 2026 – Apr 2026

- Built the NPC animation system for Bunderkin: The Ocular Eclipse, a 42-character fantasy stealth RPG in UE5 (free public demo on Steam), including cross-skeleton retargeting, animation LODs (+10 FPS), perception-based AI patrol, and a skeleton-agnostic Control Rig look-at system.

Founder & Lead Artist | Varacchi Productions LLC | Jan 2024 – Present

- Produced real-time public sculpture visualizations for Burlington, VT, and Annapolis, MD (Burlington: approved and constructed); delivered client work for Victor Victor x Nike; developed open-source tools.

Lead Technical Artist | SuperPlastic | Mar 2023 – Dec 2023

- Led a 5-person real-time team shipping 3–5 videos/week; drove the studio's transition to UE5 (render time from overnight to ~10 seconds/frame); built and ran the mocap lab (Xsens, Faceware).

Technical Artist | SuperPlastic | Jun 2022 – Mar 2023

- Built the real-time mocap pipeline behind 256+ short-form videos, 1M YouTube subscribers in one month, and 232M+ views; wrote a custom C++ retargeting node for lag-free live capture.

Junior Technical Artist | SuperPlastic | Mar 2022 – Jun 2022

- Built a Python tool suite for Maya (UV cleaner, naming checker, FBX exporter), adopted by 5+ artists.

Earlier roles: Videographer/Animator/Photographer, Green State Gardener (2021–2022); Graphic Design Intern, Gilbert Displays (2019); Creative Design Intern, Indigo Intellect (2018–2019).

RESEARCH & TEACHING INTERESTS

AI-assisted creative pipelines · calibration and evaluation of vision-language models · storyboard-driven 3D scene generation · motion capture and real-time animation systems · AI literacy and validation practices in art and design education

PUBLICATIONS & RESEARCH

Varacchi, T. 2026. “AI Score Hallucination in Vision-Language Models: Measuring Self-Assessment Calibration for Iterative 3D Scene Positioning.” In ACM SIGGRAPH 2026 Posters, Los Angeles, CA. (Accepted; to appear.)

Varacchi, T. 2025. “AI-Powered Storyboard to 3D Scene Generation: A Comparative Analysis of Vision-Language Models for Iterative Positioning in Unreal Engine.” M.S. thesis, Drexel University. doi:10.17918/00011222.

Thesis research identified “AI Score Hallucination”: a 37.2-point gap between AI self-reported confidence (~84/100) and expert-validated accuracy across 36 scenarios and 3 vision-language models.

CONFERENCE ACTIVITY

Refereed Posters

2026 – “AI Score Hallucination in Vision-Language Models,” ACM SIGGRAPH 2026 Posters, Los Angeles, CA.

Sessions Organized

2026 – Organizer, “Can AI Judge Its Own Work?” Birds of a Feather, ACM SIGGRAPH 2026, Los Angeles, CA.

Invited Talks

2026 – Invited talk, SensAI “Worlds in Action” hackathon (SIGGRAPH edition), Los Angeles, CA.

CREATIVE & PROFESSIONAL WORKS

Public Commissions

Burlington Public Sculpture Visualization (2024) – real-time path-traced proposal for the City of Burlington, VT; approved, and the sculpture was constructed.

Annapolis Public Sculpture Visualization (2024) – site-specific real-time visualization, Annapolis, MD.

Game Credits

Bunderkin: The Ocular Eclipse (Studio Zubio, 2026) – Technical Animator; free public demo on Steam.

Open-Source Software

StoryboardTo3D (2025–Present) – open-source (MIT) Unreal Engine 5 plugin generating 3D scenes from storyboards with vision-language models; C++/Python. github.com/tylervaracchi/storyboard-to-3d

TECHNICAL PROFICIENCIES

Unreal Engine 5 (Blueprints, Animation Blueprints, Control Rig, Niagara, Sequencer, real-time path tracing) · Maya · Unity · Substance Painter/Designer · motion and facial capture (Xsens, Faceware, Rokoko, ARKit, Live Link) · 3D scanning/photogrammetry · Python, C++, C#, MEL · vision-language models (OpenAI GPT, Anthropic Claude, LLaVA) · digital fabrication (FDM/SLA 3D printing, laser cutting, Arduino) · Perforce, Git, USD, Blackboard LMS

COURSES PREPARED TO TEACH

3D Modeling & Animation · Real-Time 3D with Unreal Engine · Technical Art & Pipeline Development · Motion Capture for Animation · Game Development I & II · AI Tools for Creative Work · Digital Storytelling · Virtual Production Foundations · Portfolio Development

HONORS, SERVICE & AFFILIATIONS

Eagle Scout, Boy Scouts of America (led construction of a community reading circle; raised \$3,000) · ARCC Programs, Cuba (2016): taught English and built accessible housing · Member: ACM, ACM SIGGRAPH, IGDA

REFERENCES

Emil Polyak, Thesis Advisor & Professor, Drexel University

Michael Wagner, Digital Media Department Head, Drexel University

Jared Johnson, Former Supervisor, SuperPlastic · Contact details available upon request.