

Everett M. Carpenter

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EDUCATION

- **Rensselaer Polytechnic Institute (RPI)** Troy, NY
[In progress] Bachelor of Science - Music
Fall 2026
Courses: Music Performance Systems, Sonification, Sound Design, Spatial Audio, Ethnomusicology, Sound Studies, Mathematics, Proofs
- **College of Saint Rose (SR)** Albany, NY
[Completed in part] Bachelor of Music Industry
Fall 2023
Courses: Studio Sound Recording, Music Performance, Composition, Music Business, Music Theory and Ear Training

WORK EXPERIENCE

- **Rensselaer Polytechnic Institute, Troy** Part-time
Teaching Assistant
August 2026 - December 2026
- **United States District Court, NYND, Albany** Full-time
Student Intern
May 2026 - August 2026
- **Albany Symphony Orchestra** Part-time
Student Intern
May 2025 - August 2025
- **United States District Court, NYND, Albany** Part-time
Student Intern
May 2025 - August 2025
- **United States District Court, TXWD, San Antonio** Full-time
District Court Clerk
May 2024 - August 2024
- **United States District Court, TXWD, San Antonio** Full-time
Probation Office Clerk
May 2023 - August 2023

HONORS, AWARDS AND GRANTS

- **Student Research and Creative Activities Grant by the RPI School for Humanities, Arts and Social Sciences:** This grant was awarded for the funding of travel to the United Kingdom for attendance and presentation at the Spatial Audio Gathering. (Spring 2026)
- **Student Research and Creative Activities Grant by the RPI School for Humanities, Arts and Social Sciences:** This grant was awarded to Joseph Latka, Anke Sun and I for the development and funding of SITES. (Fall 2026)
- **Invited Guest Speaker to 2nd Guest Speaker Series hosted by the University of New Haven's Audio Engineering Society:** Ambisonics, Microphones, Speakers and Software. (April 2026)
- **Dean's List at Rensselaer Polytechnic Institute (Spring 2026):**
- **Invited Guest Speaker to 1st Guest Speaker Series hosted by the University of New Haven's Audio Engineering Society:** An Introduction to The Psychoacoustics Relevant to Spatial Audio. (November 2025)
- **Dean's List at Rensselaer Polytechnic Institute (Fall 2025):**
- **Michael D. Normandin Innovative Computing Technology Award:** Outstanding use of computing technology and analog systems as creative tools for music composition. (Spring 2024)
- **President's List at the College of Saint Rose (Spring 2024):**
- **Nominated for best original music in Bexar County's BEXARFest film festival. (August 2021):**

PROJECTS

- **Chumbi, Accesible Ambisonic Audio in the ChuckK Programming Language:** (Actively Maintained since May 2025)
A collection of C++ plugins for the ChuckK programming language which were designed with the goal of making spatial audio via ambisonics accessible for composers, musicians and hobbyists.
- **Contributions to the ChuckK Programming Language:** Designed and programmed the algorithm for calculation of spherical harmonics in the ChuckK programming language. Added to ChuckK version 1.5.5.8, details can be found at commits fd8bf14 and e025a76
- **Sonic, Iterative, Tactile Environments (SITES):** (Actively Maintained since Fall 2025) Created by myself and a team of two PhD students at RPI, Joey Latka and Anke Sun. An interactive, immersive collection of environments which embody reality, perceptual space and other-worldly spaces. Uses body movement to control audio and visual environments.
- **Archival of Pauline Oliveros' Collection:** Starting the fall of 2025, I began organizing and archiving Pauline Oliveros' collection of various digital storage devices left at the Center for Deep Listening at RPI. This process included the digital archiving of laptops, desktops, external harddrives and other electronic devices. This project was financially supported by The Center for Deep Listening and Rensselaer Polytechnic Institute.

- **Premier of *C(s) for Once*:** Performed a premier of *C(s) for Once* by Pauline Oliveros. This piece utilized three tape machines which I repaired and calibrated for the performance. During the piece, I operated the machines configured in a three-tap delay line, with each tap spatialized around the concert hall. A similar system was realized in Pro Tools and operated by my colleague Ross Rice.
- **Restoration of Ampex Tape Machines:** During my time at the College of Saint Rose, I worked with Dr. Sean McClowry to repair and restore various electromagnetic tape machines. These projects equipped me with the skills to calibrate and repair tape machines which I later utilized at RPI. I later utilized four of these tape machines in an installation at the College of Saint Rose.

PUBLICATIONS

1. • E. Carpenter, "Chuck'd Into Space, Higher-Order Ambisonics in The Chuck Programming Language", *Proceedings of The Spatial Audio Gathering of 2026*, pg.119 - 123, June 2026
Print: <https://everettmiles.com/pdfs/EMC-SAG26%20v2.pdf>
DOI: <https://doi.org/10.5281/zenodo.21381974>

SELECTED WRITINGS, PRESENTATIONS, AND PERFORMANCES

- Paper: Chuck'd Into Space, Higher-Order Ambisonics in The Chuck Programming Language in the Proceedings of The Spatial Audio Gathering of 2026, Leeds, UK — June 2026
- Presentation: Un-tooling the Interface: Somatic Entanglement and Queer Ecologies in SITES @ Innovation in Music Conference of 2026 in Aalborg, Denmark — June 2026
- Paper: Multidimensional Timbre Mapping Using The Spherical Harmonic Transform — June 2026
PDF: <https://everettmiles.com/pdfs/MultiDimTimbreSpaceMappingViaTheSHT.pdf>
- Performance and Demonstration: Performed and demonstrated SITES alongside research partners Anke Sun and Joseph Latka at the North American Conference on Video Game Music (NACVGM) — May 2026
- Poster: An Object-Based Paradigm for Higher-Order Ambisonics in Chuck
Presented at The Spatial Audio Gathering in Leeds, UK — March. 2026