Mariel Pettee

Physicist, AI researcher, and artist
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Education

2021	YALE UNIVERSITY, New Haven, CT	PhD in Physics
2015	UNIVERSITY OF CAMBRIDGE, Trinity College, Cambridge, UK	MASt in Physics
	Lt. Charles H. Fiske III Harvard-Cambridge Scholar	
2014	HARVARD UNIVERSITY, Cambridge, MA	AB in Physics & Mathematics
	Cum Laude, High Honors in Field	
	Secondary in Dramatic Arts	

Research Experience

2025 - Now BERNICE DURAND ASSISTANT PROFESSOR OF PHYSICS • *University of Wisconsin–Madison*

2022 - Now GUEST RESEARCHER • *Flatiron Institute & Polymathic AI*

As a founding member of the Polymathic AI collaboration, I am working to build the first foundation models for science. My focus areas include numerical embeddings in language models, understanding interdisciplinary domain transfer, and interpretability.
Supervisor: Prof. Shirley Ho

2021 - 2025 CHAMBERLAIN POSTDOCTORAL FELLOW • *Lawrence Berkeley National Lab*

My postdoctoral work is grounded in radical applications of AI for fundamental physics. Highlights include the first unbinned measurement at the LHC, finding stellar streams in the Milky Way with weakly-supervised anomaly detection, improving pion reconstruction with GNNs, and exploring best practices for learning likelihood ratios.
Supervisor: Dr. Benjamin Nachman

2020 AI INTERN • *Intel AI Lab*

As a summer intern with the AI Lab at Intel, I developed a recurrent VAE architecture to learn latent graph representations of the human body in motion.
Supervisor: Dr. Hanlin Tang

2016 - 2021 GRADUATE RESEARCHER • *Yale University & the ATLAS Experiment at CERN*

The highlight of my PhD thesis was finding the first evidence of a Higgs boson produced in association with a leptonically-decaying W or Z boson and decaying into a pair of tau leptons. I also implemented RNN-based tau triggers in ATLAS and performed trigger and data acquisition optimization studies at the Mu2e Experiment at Fermilab.
Supervisor: Prof. Sarah Demers

2014 - 2015 GRADUATE RESEARCHER • *University of Cambridge*

While pursuing my Master's degree at the University of Cambridge, I constructed and tested nanoscale battery prototypes made of DNA-functionalized gold nanocolloids.
Supervisor: Prof. Erika Eiser

Selected Publications

of papers on my Google scholar page. (**Note:** ▷ *indicates alphabetical author ordering.*)

2025   F. Canelli, K. Cormier, A. Cudd, D. Gillberg, R. G. Huang, W. Jin, S. Lee, V. Mikuni, L. Miller, B. Nachman, J. Pan, T. Pani, **M. Pettee**, Y. Song, F. Torales Acosta. A Practical Guide to Unbinned Unfolding. [`arXiv:2507.09582`] [hep-ph].

A. Das, N. Lourie, S. Golkar, **M. Pettee.** What's In Your Field? Mapping Scientific Research with Knowledge Graphs and Large Language Models. [`arXiv:2503.09894`] [cs.CL].

L. Zerkowski, Z. Wang, I. Vidrin, **M. Pettee.** Invisible Strings: Revealing Latent Dancer-to-Dancer Interactions with Graph Neural Networks. [`arXiv:2503.04816`] [cs.CV].

Z. Wang, L. Zerkowski, I. Vidrin, **M. Pettee**. Dyads: Artist-Centric, AI-Generated Dance Duets. [`arXiv:2503.2503.03954`] [cs.CV].

2024   ATLAS Collaboration (**Contact Editor**). A Simultaneous Unbinned Differential Cross Section Measurement of 24 Z+jets Kinematic Observables with the ATLAS Detector. *Phys. Rev. L.* [`CERN–EP–2024–132`] [`arXiv:2405.20041`] [hep-ex].

ATLAS Collaboration (**Contact Editor**). Evidence of the VH, H→ττ process with the ATLAS detector in Run 2. *Phys. Rev. B.* [`CERN–EP–2023–272`] [`arXiv:2312.02394`] [hep-ex].

2023   S. Golkar & **M. Pettee**, M. Eickenberg, A. Bietti, M. Cranmer, G. Krawezik, F. Lanusse, M. McCabe, R. Ohana, L. Parker, B. Régalo-Saint Blancard, T. Tesileanu, K. Cho, S. Ho. xVal: A Continuous Number Encoding for Large Language Models. *Accepted contribution at NeurIPS AI for Science Workshop. Submitted.* [`arXiv:2310.02989`] [stat.ML].

M. Pettee, S. Thanvantri, B. Nachman, D. Shih, M. R. Buckley, J. H. Collins. Weakly-Supervised Anomaly Detection in the Milky Way. *MNRAS.* [`arXiv:2305.03761`] [astro-ph.GA].

S. Rizvi, **M. Pettee**, B. Nachman. Learning Likelihood Ratios with Neural Network Classifiers. *JHEP.* [`arXiv:2305.10500`] [hep-ph].

V. Mikuni, **M. Pettee**, B. Nachman. Fast Point Cloud Generation with Diffusion Models in High Energy Physics. *Phys. Rev. D.* [`arXiv:2304.01266`] [hep-ph].

▷ A. Huang, X. Ju, J. Lyons, D. Murnane, **M. Pettee**, L. Reed. Heterogeneous Graph Neural Network for Identifying Hadronically Decayed Tau Leptons at the High Luminosity LHC. *JINST.* [`arXiv:2301.00501`] [physics.ins-det].

2022   ▷ A. Bogatskiy, S. Ganguly, T. Kipf, R. Kondor, D. W. Miller, D. Murnane, J. T. Offermann, **M. Pettee (co-editor)**, P. Shanahan, C. Shimmin, and S. Thais. Symmetry Group Equivariant Architectures for Physics. *Snowmass 2021 White Paper.* [`arXiv:2203.06153`] [cs.LG].

ATLAS Collaboration (**co-editor**). Point Cloud Deep Learning Methods for Pion Reconstruction in the ATLAS Experiment. [`ATL–PHYS–PUB–2022–040`].

M. Papillon, **M. Pettee**, N. Miolane. PirouNet: Creating Dance through Artist-Centric Deep Learning. *EAI ArtsIT 2022 (Best Paper Award).* [`arXiv:2207.12126`] [cs.LG].

M. Papillon, **M. Pettee**, N. Miolane. Intentional Choreography with Semi-Supervised Recurrent VAEs. *NeurIPS 2022 Workshop on ML for Creativity and Design.* [`arXiv:2209.10010`] [cs.LG].

▷ G. Kasieczka, R. Mastandrea, V. Mikuni, B. Nachman, **M. Pettee**, D. Shih. Anomaly Detection Under Coordinate Transformations. [`arXiv:2209.06225`] [hep-ph].

2021   **M. Pettee**. Interdisciplinary Machine Learning for Particle Physics. *PhD Thesis, Yale University.*

2020   **M. Pettee**, S. Miret, S. Majumdar, and M. Nassar. Choreo-Graph: Learning Latent Graph Representations of the Dancing Body. *NeurIPS 2020 Workshop on ML for Creativity and Design.*

2019   **M. Pettee**, C. Shimmin, D. Duhaime, and I. Vidrin. Beyond Imitation: Generative and Variational Choreography via Machine Learning. *Proceedings of the 10th International Conference on Computational Creativity.* [`arXiv:1907.05297`] [cs.LG].

The ATLAS Collaboration (**co-editor**). Expected Performance of the ATLAS Detector at the High-Luminosity LHC. [`ATL–PHYS–PUB–2019–005`].

Invited Talks

On Multimodal Embeddings for Scientific Data

2025	Yale University	Physics x Data Science Seminar

Invisible Cities: Toward a Multi-Modal Era of Fundamental Physics Research

2025	Madison, WI	Lepton-Photon 2025
	Santa Clara University	Physics Department Colloquium
	UW-Madison	Physics Department Colloquium
	Georgia Tech	Physics Department Colloquium
2024	Carleton University	Physics Department Colloquium
	Lawrence Berkeley National Lab	Berkeley Lab AI for Science Summit
	CERN	Foundation Models for Science Mini-Workshop
	Argonne National Laboratory	HEP Theory Seminar
	Smith College	Physics Department Colloquium
	Bard College	Physics Department Colloquium

A Simultaneous Unbinned Differential Cross-Section Measurement of 24 Z+jets Observables

2024	*Ljubljana, Slovenia*	ATLAS Standard Model Workshop

Towards Foundation Models for Fundamental Physics

2024	NASA, *Huntsville, AL*	Science Mission Directorate AI Workshop
	DESY, *Hamburg, Germany*	1st Large Language Models in Physics Symposium
	LBNL, *Berkeley, CA*	Physics Division Research Progress Meeting
	U. of Tokyo, *Tokyo, Japan*	AI-Driven Discovery in Physics & Astrophysics
	KEK, *Tsukuba, Japan*	ML for HEP Workshop

What Do Language Models Have to Say About Fundamental Physics?

2024	MIT, *Cambridge, MA*	IAIFI Summer Workshop
	UC Berkeley, *Berkeley, CA*	Bakar Inst. of Digital Materials for the Planet Seminar
	SLAC, *Menlo Park, CA*	SLAC AI Seminar
2023	IBM, *Zurich, Switzerland*	IBM Research Seminar

DANCING WITH MYSELF: AI AND CHOREOGRAPHY

2025	Munich Conservatory, *Germany*	Artificial Intelligence in Culture and Arts Lecture
2024	School of the Art Inst. of Chicago	Resarch Seminar
	Pratt Institute, *Brooklyn, NY*	AI in the Humanities Symposium
	Foothill College, *Los Altos Hills, CA*	Creativity in the Age of AI Symposium
2023	Mills College, *Oakland, CA*	DanceHack Workshop
2022	U. of Alabama, *Tuscaloosa, AL*	Theatre & Dance Department Colloquium
	Amherst College, *Amherst, MA*	AI in the Liberal Arts Seminar
	Ballet Des Moines, *Des Moines, IA*	Panel Discussion: Creativity, Science, and Ethics
	Kinetech Arts, *San Francisco, CA*	Y-Exchange Featured Artist
2020	Kinetech Arts, *San Francisco, CA*	Kinetech Open Lab Talk
	Brown U., *Providence, RI*	Conference for Research on Choreographic Interfaces

INTERDISCIPLINARY AI FOR FUNDAMENTAL PHYSICS

2023	*Ascona, Switzerland*	Hammers & Nails (Swiss Edition)
	Flatiron CCA, *New York, NY*	KITP Workshop on Data-Driven Galaxy Evolution
2022	Univ. of Alabama, *Tuscaloosa, AL*	Physics Department Colloquium
	SLAC, *Menlo Park, CA*	SLAC AI Seminar
	UC Irvine, *Irvine, CA*	Physics & Astronomy Machine Learning Seminar Series
	Imperial College, *London, UK*	Data Learning Working Group Seminar
	Amherst College, *Amherst, MA*	Artificial Intelligence in the Liberal Arts Seminar Series
	Cornell U., *Ithaca, NY*	Laboratory for Elementary Particle Physics Journal Club
2021	UC Berkeley, *Berkeley, CA*	Berkeley Institute for Data Science ML + Science Forum
	Seattle U., *Seattle, WA*	Physics Department Colloquium
	U. of Tennessee, *Knoxville, TN*	HEP Seminar
	Flatiron Institute, *New York, NY*	Center for Computational Astrophysics ML Forum

WEAKLY-SUPERVISED ANOMALY DETECTION IN THE MILKY WAY

| 2023 | UChicago, *Chicago, IL* | Data Science Institute & James Franck Institute Seminar |
| | Rutgers U., *New Brunswick, NJ* | High-Energy Physics Theory Seminar |

EQUIVARIANCE MEETS INVARIANCE: PHYSICS-INFORMED MACHINE LEARNING

| 2023 | *Minneapolis, MN* | American Physical Society (APS) April Meeting |

Contributed Talks

A HIGH-DIMENSIONAL, UNBINNED STANDARD MODEL MEASUREMENT WITH THE ATLAS EXPERIMENT

| 2025 | Caltech, *Pasadena, CA* | ML4Jets |

A SIMULTANEOUS UNBINNED DIFFERENTIAL CROSS-SECTION MEASUREMENT OF 24 Z+JETS OBSERVABLES

| 2024 | Sorbonne Université, *Paris, France* | France-Berkeley PHYSTAT Conference on Unfolding |

USING CLASSIFIERS FOR UNBINNED UNFOLDING

| 2024 | Sorbonne Université, *Paris, France* | France-Berkeley PHYSTAT Conference on Unfolding |

Weakly-Supervised Anomaly Detection in the Milky Way

2023	Flatiron Institute, *New York, NY*	Flatiron-Wide Machine Learning Meeting

Point Cloud Methods for Pion Reconstruction in the ATLAS Detector

2022	CERN, *Geneva, Switzerland*	Inter-experiment Machine Learning Workshop
	New York, NY	APS April Meeting

Dancing with Myself: AI and Choreography

2021	*St. Louis, MO*	Strange Loop Conference

Choreo-Graph: Learning Latent Graph Representations of the Dancing Body

2020	NeurIPS, *Vancouver, Canada*	Workshop on ML for Creativity and Design

Run 3 Triggers for HLeptons Analyses

2020	*Online*	ATLAS Tau & HLeptons Workshop

Expected ATLAS Performance at the HL-LHC

2019	UMass Amherst, *Amherst, MA*	US ATLAS Workshop

Overview of Tau vs. Jet Identification

2019	*Prague, Czech Republic*	ATLAS Tau & HLeptons Workshop

Beyond Imitation: Generative Choreography via Machine Learning

2019	UNC Charlotte, *Charlotte, NC*	International Conference on Computational Creativity

RNN Tau Identification in the ATLAS HLT

2018	Fermilab, *Batavia, IL*	US LHC Users Association Meeting
	CERN, *Geneva, Switzerland*	ATLAS Machine Learning Workshop

The 2018 ATLAS Tau Trigger & Combined Performance

2018	U. of Pittsburgh, *Pittsburgh, PA*	US ATLAS Workshop

ATLAS Tau Trigger & Combined Performance at High μ

2018	CERN, *Geneva, Switzerland*	ATLAS P&P Physics Plenary

FTK & the Tau Trigger

2018	CERN, *Geneva, Switzerland*	ATLAS TDAQ Week

Awards

2023	DOE Mission Science Allocation Award	*NERSC*
	• Allocated over 120,000 GPU hours	
	• Title: "Multidisciplinary AI Models for Science"	
2021	Owen Chamberlain Postdoctoral Fellowship	*Lawrence Berkeley National Lab*
2018	Lightning Round Talk Winner	*US LHC Users Association*
	Women's Faculty Forum Seed Grant	*Yale University*

2016	Winner, Windy City Physics Slam	*ICHEP*
	• PBS Chicago Interview Clip	
	Distinguished Poster Award (Top 20 out of 500)	*ICHEP*
2015	Leigh Page Prize	*Yale University*
	Honorable Mention	*NSF Graduate Research Fellowship*
2014	Harvard-Cambridge Scholarship	*Harvard University*
	• Full tuition for a master's program at Cambridge	
	Julia Shaffner Memorial Prize	*Harvard University*
	• Outstanding woman in science	
2013	President's Challenge Finalist	*The Harvard Innovation Lab*
	15 Most Interesting Seniors	*The Harvard Crimson*
2012	Judges' Award for Acting	*International Student Drama Festival*
	Certificate of Distinction in Teaching	*Harvard University*
	Caroline Isenberg Fellowship	*Harvard University*
	Elizabeth Cary Agassiz Fellowship	*Harvard University*
2011	Best Lead Actress in a Play	*Harvard Theater Award*

Press

2024 Viewing the Standard Model with unprecedented detail through the lens of AI
Berkeley Lab Physical Sciences News

2023 ATLAS measures rare Higgs boson interaction with tau leptons, *ATLAS Briefing*

"Scientists Begin Building AI for Scientific Discovery Using Tech Behind ChatGPT"
• Simons Foundation Press Release
• Berkeley Lab Article

2022 Interviewee on the Cognicast podcast
• A wide-ranging discussion of my research trajectory across AI, physics, and art
• Episode webpage
• Listen on Apple Podcasts

2021 Mariel Pettee successfully defends PhD thesis, *Yale Physics*

2020 Advice to Women in STEM: Mariel Pettee, *Yale Scientific Magazine*

2019 Feature on Yale University's Instagram page

Featured on Women+ Art AI

2016 Scientists Battle for Physics Slam Crown, *PBS Chicago*

2013 15 Most Interesting Seniors: Mariel N. Pettee, *The Harvard Crimson*

Teaching Experience

Graduate Courses

2025 PHYSICS 805: Research Methods for Machine Learning *&* Physics   *UW-Madison*

Graduate-level Courses on Scientific Teaching

2016	Physics 530: Theory and Practice of Scientific Teaching for Physical Scientists	*Yale*
2014	Astro 302: Scientists Teaching Science	*Harvard*

Teaching Assistant Experience

Note: ▷ *indicates courses for which I was the sole TA.*

2016 - 2018	▷	Physics 115: The Physics of Dance	*Yale University*
2018	▷	American Studies 349: Technologies for Movement Research	*Yale University*
2017		Physics 171: University Physics for the Life Sciences	*Yale University*
2016		Physics 205L: Modern Physical Measurement	*Yale University*
2015		Physics 165L: General Physics Laboratory	*Yale University*
2012 - 2013	▷	Math 121: Linear Algebra and Applications	*Harvard University*
2013		Math 110: Vector Space Methods for Differential Equations	*Harvard University*

Guest Lectures

2023	The Language of Movement	Amherst College, *Amherst, MA*
2021	Graduate-level Machine Learning for Physics	U. of Alabama, *Tuscaloosa, AL*

Mentorship

Fall 2024	Malika Golshan, post-grad in Physics at UC Berkeley *Weakly Supervised vs. Fully Supervised Learning*
Summer 2024	Abhipsha Das, grad student in Computer Science at NYU Courant Institute *Mapping the Landscape of Scientific Literature with LLMs*
Summer 2024	Luis Zerkowski, grad student in Artificial Intelligence at University of Amsterdam *Analyzing Choreographic Duets with Graph-Based Autoencoders*
Summer 2024	Zixuan Wang, grad student in Computer Science at Georgia Institute of Technology *Generating Choreographic Duets with Transformers* **Next position:** software engineer at State Street
2022 - 2024	Shahzar Rizvi, undergrad *&* then graduate student in Statistics at UC Berkeley *Learning Likelihood Ratios with Neural Network Classifiers* (published in JHEP) **Next position:** graduate student at MIT
2022 - 2024	Sowmya Thanvantri, undergrad in Physics at UC Berkeley *Weakly-Supervised Anomaly Detection in the Milky Way* (published in MNRAS) **Next position:** graduate student at Princeton
2022	Jason Wong, undergrad in Physics at UC Berkeley *Optimization Studies for the ATLAS OmniFold Measurement* (ATLAS preprint) **Next position:** graduate student at UC Berkeley

Leadership & Service

2024 - 2025	Organizer for NeurIPS Physical Sciences Workshop
2024	Google Summer of Code Mentor
	• Directly supervised two open-source 12-week research projects with students
	Co-Coordinator of Polymathic AI's future research & development cohort
2019 - 2024	Reviewer for NeurIPS Physical Sciences Workshop
2017 - 2021	HLeptons Trigger Liaison: Trigger Studies for the ATLAS $H \to \tau\tau$ Analysis Group
2020	Session Co-Convener, PyHEP 2020 (Conference for Python in High-Energy Physics)
2019	Reviewer for Women in Machine Learning (WiML) Workshop
2014	President, *The Signet Society of Arts & Letters*, Harvard University

Inclusion & Outreach

2022 - 2024	QuarkNet Speaker
	• Presented a talk on physics, art, and ML to high school students
	• Answered their questions in a separate hour-long interview
2020	Member of the American Physical Society's Inclusion, Diversity, and Equity Alliance
2019 - 2021	Member of the Yale Physics Climate & Diversity Committee
	• Advocated for a department-wide discussion of discrimination in our community
	• Contributed to the design of our department's Code of Conduct
2018 - 2020	US LHC Users Association advocacy trip to Capitol Hill
	• Met with the offices of around 15 representatives from Congress each year
	• Garnered support for high-energy physics research through DOE & NSF
2017 - 2018	Speaker, *Science in the News*, delivering scientific talks to the New Haven public
	Girls' Science Investigations at Yale
	• Volunteer & "ask-a-scientist" Q&A speaker
2016	Winner, Windy City Physics Slam at ICHEP
	Choreographer of *Form Factors*, a dance intervention with physicists at ICHEP
2015 - 2020	Yale Women in Physics Mentor

Scientific Essays

2025 How to Unfold with AI
CERN Courier, Cover Feature, Jan/Feb 2025 Edition

2024 A high-dimensional jet-powered measurement of the strong force
CERN Experimental Physics Newsletter

2023 LLMs and the Language of Science
APS Topical Group on Data Science Newsletter

xVal: A Continuous Number Encoding for LLMs
Polymathic AI Collaboration Blog Post

2018 Theories of Everything
Sightline Arts

Now or Never: The Case for a Larger Hadron Collider
Yale Distilled Magazine

Posters

2022 Point Cloud Methods for Pion Reconstruction in the ATLAS Detector
Large Hadron Collider Physics Conference, *Online*

2020 Choreo-Graph: Learning Latent Graph Representations of the Dancing Body
Women in Machine Learning (WiML) Workshop at NeurIPS, *Online*

RNN Tau Identification in the ATLAS High-Level Trigger
ATLAS Trigger & Data Acquisition Week at CERN, *Geneva, Switzerland*

2019 Generative & Variational Choreography via Machine Learning
Women in Machine Learning (WiML) Workshop at NeurIPS, *Vancouver, Canada*

Machine Woman: Preservation, Memory, Forgetting, and AI
Women's Faculty Forum, Yale University, *New Haven, CT*

2017 Performance of the ATLAS Tau Trigger in Run 2
Advanced Computing & Analysis Techniques in Physics Research (ACAT), *Seattle, WA*

2016 Trigger Studies for the Mu2e Experiment (**Poster Award**: top 20 out of 500)
International Conference on High Energy Physics (ICHEP), *Chicago, IL*

Arts

AI & Art

2023 *mememormee*: an evening-length work featuring AI-generated choreography set on six dancers,
following a residency at Amherst College
- Spotlight Presentation at the 2023 NeurIPS Workshop on ML for Creativity & Design

2021 Untitled Bird Project: a 1 hour pop-up exhibit featuring AI-generated bird calls situated in nature

2020 Mirror Exercise: an AI-generated duet with myself
- Featured in *Le Mérite*, at the Comédie de Caen, Théâtre des Cordes, France.

- Highlighted in the NeurIPS Workshop on ML for Creativity and Design's AI Art Gallery
- Digital exhibition at *Level Up*: The Dramaturgy of Digital Performance & Design
- Selected by the AI Transparency Institute & featured at the 2020 AI Governance Forum
- Boston Cyberarts Gallery exhibition *Perceptions / Distortions* (cancelled due to COVID)

Studio fellow, *Yale Center for Collaborative Arts & Media*
- Year-long paid fellowship to develop work across art & technology

2019 SIGMA: a short film of AI-generated choreography
- Featured in the NeurIPS 2019 Workshop on ML for Creativity & Design's AI Art Gallery

Live Performance

2022 Dancer, *Sublimation*
- By Kinetech Arts
- Supported by the Djerassi Resident Artists Program and Creative Work Fund
- Performed at David Ruth Glass Studio, Oakland, CA

Dancer, *Detour*
- By Kinetech Arts, commissioned by the Berkeley Dance Project
- Performed at Zellerbach Playhouse, Berkeley, CA

2020 Dancer & Coordinator, *Transpositions*
- Dancer in virtual pieces by Brian Seibert, Renee Robinson, and Elm City Dance Collective

Choreographer, *Elon Musk and the plan to Blow Up Mars the musical*
- Yale Cabaret, dir. Liam Bellman-Sharpe

Dancer, Coordinator, & Rehearsal Director, *Yale Dance Lab*
- New work by choreographer Vicky Shick: "*everywhere*"

2019 Bill T. Jones/Arnie Zane Dance Company Intensive, *Yale Dance Theater*
- Dancer in a restaging of *D-Man in the Waters*

Featured performer, *The Hexagonal Hive and a Mouse in a Maze*
- Interviewed for a documentary by the Derek Jarman Lab, directed by Tilda Swinton

2018 Dancer, *Dance Drawings (For Jock)*
- Choreography by Emily Coates located at the Yale Art Gallery's Sol LeWitt exhibit

Paul Taylor Dance Company Intensive, *Yale Dance Theater*
- Leading role as "The Hostess" in the first restaging of Taylor's *Party Mix* in four decades

Featured performer, *Machine Woman*, dir. Anna Hagen & Jeannie Sui Wonders
- A short film documenting my AI-generated choreography research

2017 Choreographer: "La Mort du Chorégraphe", *A Different Drum Dance Company*

Urban Bush Women Intensive, *Yale Dance Theater*

2016 Gaga Intensive with Saar Harari & Lee Sher, *Yale Dance Theater*

Choreographer: "Rang Cherries", *A Different Drum Dance Company*

2015 Actor, *Attempts on Her Life*, dir. Tania Clarke, Corpus Playroom, *University of Cambridge*

Dancer, *Evolution*, ADC Theatre, *University of Cambridge*

2014 Director/Writer/Choreographer: *Symmetry Breaking*, Farkas Hall, *Harvard University*
- My senior physics thesis: an immersive multimedia performance about the Higgs boson

Choreographer-in-Residence, *Harvard Dance Center*

Dancer, *Paper Wing*, chor. Jill Johnson, Farkas Hall

2013 Arts@CERN Internship

Eurydice, *Antigonick*, dir. Ianthe Demos, American Repertory Theater Mainstage

Isabelle *&* Executive Producer, *The Edge of the Map*, dir. Calla Videt (Sightline Theater Company)

Dancer, *At Last*, Loeb Experimental Theater, Harvard University

Dancer, *On The Run*, Harvard Dance Center

2012 Vice-President *&* Mainstage Coordinator, *The Harvard-Radcliffe Dramatic Club*

Lucy, *CryHurtFood*, Loeb Experimental Theater *&* Crucible Mainstage (Sheffield, UK)

Director: *for the purpose of catching ourselves in the act of being the most*
- Set the Guinness World Record for the longest telephone conversation between two people

2011 Co-founder and collaborator, *The Harvard Generalist* artistic collective

Drama *&* Dance Proctor, *Harvard University Freshman Arts Program* (2011-2014)