


## EDUCATION

- 2026 **PhD in Computer Science**  
Massachusetts Institute of Technology  
Advisor: Arvind Satyanarayan, Visualization Group, CSAIL  
GPA: 5.0
- 2020 **MEng in Computer Science**  
Massachusetts Institute of Technology  
Advisor: Jim Glass, Spoken Language Systems Group, CSAIL  
Concentration: Machine Learning and Human Computer Interaction  
Thesis: Unsupervised Audio-Visual Learning in the Wild  
GPA: 5.0  
 Thesis
- 2018 **SB in Computer Science**  
Massachusetts Institute of Technology  
Minor: Economics  
GPA: 4.6

## ACADEMIC RESEARCH

- 2020 – Present **Massachusetts Institute of Technology**  
Research Assistant, Visualization Group  
Mentor: Arvind Satyanarayan  
Investigating methods that allow human stakeholders to estimate, measure, and shape the human-alignment of AI systems.
- 2018 – 2020 **Massachusetts Institute of Technology**  
Research Assistant, Spoken Language Systems Group  
Mentors: Jim Glass • David Harwath  
Built self-supervised machine learning models capable of learning multimodal semantic concepts from unlabeled instructional videos.
- 2016 – 2018 **Massachusetts Institute of Technology**  
Undergraduate Researcher, Spoken Language Systems Group  
Mentors: Jim Glass • Tuka Alhanai  
Applied machine learning techniques to detect early stage Alzheimer's Disease and clinical depression from patient speech.
- Jan. 2016 **Leiden University**  
Visiting Researcher, Institute of Advanced Computer Science  
Mentors: Aske Plaat • Siegfried Nijssen  
Developed clinical machine learning models to assist ICU physicians in estimating patients' blood transfusion needs.
- 2015 – 2016 **Massachusetts Institute of Technology**  
Undergraduate Researcher, Paul F. Glenn Center for Biology of Aging Research  
Mentors: Leonard P. Guarente • Christin Glorioso  
Applied computational methods to identify correlations between human gene expression and the onset of Alzheimer's disease.

## INDUSTRY RESEARCH

- Summer 2025 **Apple**  
Research Intern, Artificial Intelligence and Machine Learning Visualization Group  
Mentors: Fred Hohman • Yannick Assogba • Donghao Ren • Dominik Moritz  
Developed an auto-interpretability method that improves human understanding of large language models' internal concepts, from simple lexical indicators to complex safety-relevant behaviors.
- Summer 2023 **Apple**  
Research Intern, Artificial Intelligence and Machine Learning Visualization Group  
Mentors: Fred Hohman • Yannick Assogba • Donghao Ren • Dominik Moritz  
Designed visual analytics tools to evaluate and optimize model compression pipelines, enabling Apple engineers to build efficient, accurate, and responsible on-device models.
- Summer 2022 **IBM Research**  
Research Intern, Visual AI Lab  
Mentor: Hendrik Strobel  
Investigated visualization and algorithmic methods to accurately communicate machine learning model uncertainty to human stakeholders.

- Summer 2021 **IBM Research**  
Research Intern, Visual AI Lab  
Mentor: Hendrik Strobelt  
Created a standardized evaluation framework for AI explanation methods, helping human stakeholders select an appropriate method for their domain, understand their limitations, and apply them responsibly.
- Summer 2020 **IBM Research**  
Research Intern, Visual AI Lab  
Mentor: Hendrik Strobelt  
Developed interpretability methods for large-scale analysis of machine learning model behavior by quantifying the alignment between model and human decision-making.

## PUBLICATIONS

- 2026 **Semantic Regexes: Auto-Interpreting LLM Features with a Structured Language**  
**Angie Boggust** • Donghao Ren • Yannick Assogba • Dominik Moritz • Arvind Satyanarayan • Fred Hohman  
International Conference on Learning Representations (ICLR) 2026  
[🔗 Project](#) [📄 Paper](#) [</> Code](#)
- 2025 **Abstraction Alignment: Comparing Model-Learned and Human-Encoded Conceptual Relationships**  
**Angie Boggust** • Hyemin Bang • Hendrik Strobelt • Arvind Satyanarayan  
ACM Human Factors in Computing Systems (CHI) 2025  
[🔗 Project](#) [📄 Paper](#) [🖥️ Demo](#) [📺 Video](#) [📺 Preview](#) [</> Code](#)
- LeGrad: An Explainability Method for Vision Transformers via Feature Formation Sensitivity**  
Walid Boussselham • **Angie Boggust** • Sofian Chaybouti • Hendrik Strobelt • Hilde Kuehne  
International Conference on Computer Vision (ICCV) 2025  
[📄 Paper](#) [</> Code](#)
- 2024 **Compress and Compare: Interactively Evaluating Efficiency and Behavior Across ML Model Compression Experiments**  
**Angie Boggust\*** • Venkatesh Sivaraman\* • Yannick Assogba • Donghao Ren • Dominik Moritz • Fred Hohman  
IEEE Transactions on Visualization & Computer Graphics (VIS) 2024  
[🔗 Project](#) [📄 Paper](#) [📺 Video](#) [📺 Preview](#) [</> Code](#)
- 2023 **VisText: A Benchmark for Semantically Rich Chart Captioning**  
Benny J. Tang\* • **Angie Boggust\*** • Arvind Satyanarayan  
The Annual Meeting of the Association for Computational Linguistics (ACL) 2023  
[🔗 Project](#) [📄 Paper](#) [📺 Video](#) [🔗 Dataset](#) [</> Code](#) [📄 Press](#)  
[🏆 Outstanding Paper](#)
- Saliency Cards: A Framework to Characterize and Compare Saliency Methods**  
**Angie Boggust\*** • Harini Suresh\* • Hendrik Strobelt • John V. Gutttag • Arvind Satyanarayan  
ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2023  
[🔗 Project](#) [📄 Paper](#) [📺 Video](#) [🔗 Repo](#) [📄 Press](#)
- DiffusionWorldViewer: Exposing and Broadening the Worldview Reflected by Generative Text-to-Image Models**  
Zoe De Simone • **Angie Boggust** • Arvind Satyanarayan • Ashia Wilson  
arXiv 2023  
[📄 Paper](#) [</> Code](#)
- 2022 **Shared Interest: Measuring Human-AI Alignment to Identify Recurring Patterns in Model Behavior**  
**Angie Boggust** • Benjamin Hoover • Arvind Satyanarayan • Hendrik Strobelt  
ACM Human Factors in Computing Systems (CHI) 2022  
[🔗 Project](#) [📄 Paper](#) [🖥️ Demo](#) [📺 Video](#) [📺 Preview](#) [</> Code](#) [📄 Press](#)  
[🏆 Best Paper Honorable Mention](#)
- Embedding Comparator: Visualizing Differences in Global Structure and Local Neighborhoods via Small Multiples**  
**Angie Boggust\*** • Brandon Carter\* • Arvind Satyanarayan  
ACM Intelligent User Interfaces (IUI) 2022  
[🔗 Project](#) [📄 Paper](#) [🖥️ Demo](#) [📺 Video](#) [</> Code](#)  
[🏆 Best Paper Honorable Mention](#)
- 2021 **AVLnet: Learning Audio-Visual Language Representations from Instructional Videos**  
Andrew Rouditchenko\* • **Angie Boggust\*** • David Harwath • Brian Chen • Dhiraj Joshi • Samuel Thomas • Kartik Audhkhasi • Hilde Kuehne • Rameswar Panda • Rogerio Feris • Brian Kingsbury • Michael Picheny • Antonio Torralba • Jim Glass  
INTERSPEECH Conference 2021  
[🔗 Project](#) [📄 Paper](#) [📺 Video](#) [</> Code](#)
- Multimodal Clustering Networks for Self-Supervised Learning From Unlabeled Videos**  
Brian Chen • Andrew Rouditchenko • Kevin Duarte • Hilde Kuehne • Samuel Thomas • **Angie Boggust** • Rameswar Panda • Brian Kingsbury • Rogerio Feris • David Harwath • Jim Glass • Brian Chen • Dhiraj Joshi • Michael Picheny  
International Conference on Computer Vision (ICCV) 2021  
[📄 Paper](#)

## Cascaded Multilingual Audio-Visual Learning from Videos

Andrew Rouditchenko • **Angie Boggust** • David Harwath • Samuel Thomas • Hilde Kuehne • Brian Chen • Rameswar Panda • Rogerio Feris • Michael Picheny • Jim Glass

INTERSPEECH Conference 2021

[🔗 Project](#) [📄 Paper](#) [📺 Video](#) [</> Code](#)

## WORKSHOPS & DEMOS

- 2025 **Chatbot Evaluation Is (Sometimes) Ill-Posed: Contextualization Errors in the Human-Interface-Model Pipeline**  
Aspen Hopkins\* • **Angie Boggust\*** • Harini Suresh\*  
Human-centered Evaluation and Auditing of Language Models (HEAL) Workshop at ACM Human Factors in Computing Systems (CHI) 2025  
[📄 Paper](#)
- 2024 **Explanation Alignment: Quantifying the Correctness of Model Reasoning At Scale**  
Hyemin Bang • **Angie Boggust** • Arvind Satyanarayan  
European Conference on Computer Vision (ECCV) Explainable Computer Vision Workshop 2024  
[🔗 Project](#) [📄 Paper](#) [</> Code](#)
- 2023 **Uncertainty Fingerprints: Interpreting Model Decisions with Human Conceptual Hierarchies**  
**Angie Boggust** • Hendrik Strobelt • Arvind Satyanarayan  
International Conference on Machine Learning (ICML) AI & HCI Workshop 2023  
[📄 Paper](#) [📄 Poster](#)
- 2021 **Shared Interest: Large-Scale Visual Analysis of Model Behavior by Measuring Human-AI Alignment**  
**Angie Boggust** • Benjamin Hoover • Arvind Satyanarayan • Hendrik Strobelt  
International Conference on Machine Learning (ICML) Workshop on Human in the Loop Learning (HILL) 2021  
[🔗 Project](#) [📄 Poster](#)
- 2020 **Shared Interest: Human Annotation vs. AI Saliency**  
**Angie Boggust** • Benjamin Hoover • Arvind Satyanarayan • Hendrik Strobelt  
Neural Information Processing Systems (NeurIPS) Demonstration 2020  
[🔗 Project](#) [📺 Video](#)
- Shared Interest: Human Annotation vs. AI Saliency**  
**Angie Boggust** • Benjamin Hoover • Arvind Satyanarayan • Hendrik Strobelt  
IEEE VIS Workshop of Visualization for AI Explainability (VISxAI) 2020  
[🔗 Project](#)
- 2019 **Grounding Spoken Language in Unlabeled Video**  
**Angie Boggust** • Kartik Audhkhasi • Dhiraj Joshi • David Harwath • Samuel Thomas • Rogerio Feris • Dan Gutfreund • Yang Zhang • Antonio Torralba • Michael Picheny • Jim Glass  
Computer Vision and Pattern Recognition (CVPR) Sight and Sound Workshop 2019  
[📄 Paper](#) [📄 Poster](#)

## TALKS & PANELS

- Reconciling AI Representations and People's Mental Models**  
Mar 2026 Northeastern University Design Research Week  
Mar 2026 Apple  
Feb 2026 Microsoft Research  
Feb 2026 University of Washington
- Semantic Regexes for LLM Auto-Interpretability**  
Sep 2025 Apple
- Human-Centric AI Alignment**  
May 2025 Boston Visualization + AI Meetup
- Abstraction Alignment**  
Apr 2025 ACM Human Factors in Computing Systems (CHI) | [🗣️ Talk](#)
- Compress and Compare**  
Oct 2024 IEEE Transactions on Visualization & Computer Graphics (VIS) | [🗣️ Talk](#)  
Aug 2024 Apple
- How mechanistic interpretability can help keep AI safe and beneficial**  
Aug 2024 New England Mechanistic Interpretability Workshop
- Saliency Cards**  
Jul 2023 IBM  
Jun 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT) | [🗣️ Talk](#)  
Jun 2023 Apple

## Human-Aligned Machine Learning

Jul 2022 University of Konstanz  
Nov 2021 MIT EECS Graduate Women of Course 6 Summit

## Shared Interest

Jun 2022 MIT Open Learning Horizons | 🗣️ Talk  
May 2022 ACM Human Factors in Computing Systems (CHI) | 🗣️ Talk  
Dec 2020 Neural Information Processing Systems (NeurIPS) Demonstration  
Oct 2020 IEEE VIS Workshop of Visualization for AI Explainability (VISxAI)

## The Embedding Comparator

Mar 2022 ACM Intelligent User Interfaces (IUI) | 🗣️ Talk  
Nov 2019 CSAIL-MSR Trustworthy and Robust AI Workshop

## PRESS

- Jun 2023 **Researchers teach an AI to write better chart captions**  
Adam Zewe, MIT News  
[📄 Article](#)
- May 2023 **New tool helps people choose the right method for evaluating AI models**  
Adam Zewe, MIT News  
[📄 Article](#)
- Apr 2022 **New Test Compares AI Reasoning With Human Thinking**  
Charles Q. Choi, IEEE Spectrum  
[📄 Article](#)
- Apr 2022 **Does this artificial intelligence think like a human?**  
Adam Zewe, MIT News  
[📄 Article](#)

## AWARDS & GRANTS

- 2025 **MIT Research Mentoring Certificate**  
Completed a 3-session mentoring workshop.
- NDIF 405B Pilot Program**  
Research project selected for access to Llama 405B through NDIF. 🏆 *Research Grant*
- 2024 **MIT Grant Writing Training Certificate**  
Completed a 4-session grant writing training program.
- Apple Scholars in AIML PhD Fellowship**  
Full graduate fellowship for the 2024–2026 academic years. ⭐ *PhD Fellowship*
- 2023 **ACL Outstanding Paper Award**  
VisText received an Outstanding Paper award at ACL 2023. 🏆 *Paper Award*
- 2022 **MIT International Science and Technology Initiatives Research Grant**  
Travel grant to collaborate with colleagues at the University of Konstanz.
- IEEE CIS Graduate Student Research Grant**  
Research grant to collaborate with colleagues at the University of Konstanz.
- CHI Best Paper Honorable Mention Award**  
Shared Interest received a Best Paper Honorable Mention award at CHI 2022. 🏆 *Paper Award*
- SIGCHI Gary Marsden Travel Award**  
Funding to attend the ACM Conference on Human Factors in Computing Systems (CHI) 2022.
- IUI Best Paper Honorable Mention Award**  
The Embedding Comparator received a Best Paper Honorable Mention award at IUI 2022. 🏆 *Paper Award*
- 2020 **MIT John W. Jarve (1978) Fellowship**  
MIT full graduate fellowship for the 2020–2021 academic year. ⭐ *PhD Fellowship*
- 2016 **Palantir Women in Technology Scholarship**  
Awarded \$5,000 based on academic and research excellence. Selected as one of ten finalists out of 3000 applicants.
- Johnson & Johnson Scholar**  
Awarded research funding for outstanding undergraduate research. Selected as one of 18 scholars from MIT's summer undergraduate researchers.
- 2015 **MIT International Science and Technology Initiatives Research Grant**  
Travel grant to research medical applications of time-series modeling at Leiden University.

## TEACHING

- Spring 2025 **6.C85[J]: Interactive Data Visualization and Society**  
Guest Lecturer: Visualization + AI  
Professors: Catherine D'Ignazio • Crystal Lee • Arvind Satyanarayan  
Guest lectured on the role of visualization in understanding AI models and their behavior.  
[📄 Slides](#)
- Spring 2025 **CSCI 1302: Introduction to Sociotechnical Systems and HCI**  
Guest Lecturer: AI Interpretability  
Professors: Harini Suresh • Diana Freed  
Developed and delivered a guest lecture on interpretability and how it shapes our relationship with AI systems.  
[📄 Slides](#)
- Spring 2020 **6.009: Fundamentals of Programming**  
Graduate Teaching Assistant  
Professors: Ana Bell • Duane Boning • Max Goldman • Adam Hartz  
Taught fundamental programming concepts in Python to 400 students, in-person and remotely. Led a team of over 100 undergraduate TAs to conduct daily office hours.
- Fall 2019 **6.009: Fundamentals of Programming**  
Graduate Teaching Assistant  
Professors: Srini Devadas • Erik Demaine  
Developed new teaching materials, laboratory assignments, and exams for a course of 400 students. Delivered weekly recitations teaching fundamental programming concepts to a group of 30 students. Supervised weekly office hours.

## SERVICE

### Research Mentor

- Fa 2022–Sp 2025 [Hyemin Bang](#)  
MIT EECS MEng 2025 → MIT EECS PhD Student
- Summer 2024 [Helena Vasconcelos](#)  
Stanford University BS 2025 → Harvard University PhD Student
- Su 2023–Sp 2024 [Zoe De Simone](#)  
MIT EECS MSc 2024 → MIT EECS PhD Student
- Su 2023–Sp 2024 [Moulinrouge Kaspar](#)  
MIT EECS MEng 2024 → Business Analyst at McKinsey & Company
- Fa 2021–Sp 2023 [Benny J. Tang](#)  
MIT EECS MSc 2023 → Research Engineer at Meta

### Organizer

IEEE VIS Workshop of Visualization for AI Explainability (VISxAI) 2022, 2023, 2024, and 2025

### Program Committee

IEEE VIS Workshop of Visualization for AI Explainability (VISxAI) 2021

### Reviewer

ACM Human Factors in Computing Systems (CHI) 2022, 2024, 2025, and 2026  
IEEE Transactions on Visualization & Computer Graphics (VIS) 2024 and 2025  
IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR) 2025  
IEEE Transactions on Visualization and Computer Graphics (TVCG) 2025  
ACM Symposium on User Interface Software and Technology (UIST) 2025  
Neural Information Processing Systems (NeurIPS) 2021, 2022, and 2024  
International Conference on Machine Learning (ICML) 2022, 2023, and 2024

### Student Volunteer

IEEE Transactions on Visualization & Computer Graphics (VIS) 2024

### Member

Association for Computing Machinery (ACM)  
Institute of Electrical and Electronics Engineers (IEEE)

2019–Present

### MIT Admissions

Educational Counsellor

Interview prospective undergraduate students on behalf of the Admissions Committee to provide additional context about the applicants and answer questions about MIT.