Nisha Devasia

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EDUCATION

University of Washington — **Seattle, WA**
PhD Student in Human Centered Design and Engineering — *September 2023 - Present*

Massachusetts Institute of Technology — **Cambridge, MA**
S.B. in Computer Science & S.B. in Comparative Media Studies — *August 2017 - February 2021*

PUBLICATIONS

Journal Papers

- **Devasia N.** & Lee, J.H. (2024). The role of narrative in misinformation games. In *Harvard Kennedy School (HKS) Misinformation Review, 5(5)*.
- Williams R., Ali S., **Devasia N.**, DiPaola D., Hong J., Kaputsos S., Jordan B., & Breazeal C. (2022). AI + Ethics Curricula for Middle School Youth: Lessons Learned from Three Project-Based Curricula. In *International Journal of Artificial Intelligence in Education*.
- Ali S., **Devasia N**., Park HW., & Breazeal C. (2021). Social Robots as Creativity Eliciting Agents. In *Frontiers in Robotics and AI 2021; 8: 673730*.

Peer Reviewed Conference Proceedings

- Rodriguez A., **Devasia N.**, Pei M., & Kientz J. (2024). Towards Construction-Oriented Play for Vision-Diverse People. In *Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24)*.
- **Devasia N**., Figueroa A., Evans S., Herman B., & Aragon C. (2024). Student Perspectives on Learning and Teaching Data Ethics Through Speculative Game Design. In *Proceedings of the 17th International Conference on Computer-Supported Collaborative Learning (CSCL '24)*.
- Ali S. and **Devasia N**., & Breazeal C. (2022). Escape!Bot: Social Robots as Creative Problem-Solving Partners. In *Proceedings of ACM Creativity and Cognition 2022 (C&C '22)*. (**Honorable Mention Award**)
- Jordan B., **Devasia N**., Hong J., Williams R., & Breazeal C. (2021). PoseBlocks: A Toolkit for Creating (and Dancing) with AI. In *Eleventh AAAI Symposium on Educational Advances in Artificial Intelligence (EAAI-21)*.

Book Chapters

- **Devasia N**., (*in prep*). Shinra at the Intersection of Science, Technology, and Society. *The Psychgeist of Pop Culture: Final Fantasy VII*. Carnegie Mellon University: ETC Press.
- **Devasia N**., (*in prep*). Domesticating Bliss: Facilitating Long Distance Relationships Through Virtual Play. *The Psychgeist of Pop Culture: Stardew Valley*. Carnegie Mellon University: ETC Press.

Posters, Workshops & Short Papers

- Yoon, S., Evans, S., Aragon, C., Herman, B., **Devasia, N.**, Miles, T. (2024). Responsibility and Care in AI/ML Education: A Collaborative Approach to Ethical Awareness. *Association for Information Science and Technology 2024 (ASIS&T '24)*.
- **Devasia N.** & Lee J.H. The Role of Narrative in Misinformation Games. *Trust and Safety Research Conference 2024 (T&S '24)*.
- Ali S. and **Devasia N**., & Breazeal C. (2021). Designing Games for Enabling Co-creation with Social Agents. Workshop on Designing Games for and with Children: Co-design Methodologies for playful activities using AR/VR and Social Agents. *ACM/IEEE Interaction Design and Children Conference 2021 (IDC-21)*.
- Ali S., **Devasia N**., & Breazeal C. (2021). Building Child-Robot Collaborative Relationships in Creative Interactions. Workshop on Measuring Child Robot Relationships. *ACM/IEEE International Conference on Human-Robot Interaction 2021 (HRI-21)*.
- **Devasia N**., Ali S., & Breazeal C. (2020). Escape!Bot: Child-Robot Interaction to Promote Creative Expression During Gameplay. In *Extended Abstracts of the 2020 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY '20)*.

FUNDED GRANTS WITH KEY CONTRIBUTIONS

- **HCDE Doctoral Grant (University of Washington)** **Award Amount: $500**
  Connecting Eudaimonic Game Experiences to Theories of Behavior Change *2024*
  Nisha Devasia (Key personnel & Lead proposal writer), Jin Ha Lee (PI), Julie Kientz (PI)
- **CIP Innovation Fund (University of Washington)** **Award Amount: $4200**
  Effect of Transportation and Identification on Learning Outcomes in a Misinformation Education Game *2024*
  Nisha Devasia (Key personnel & Lead proposal writer), Jin Ha Lee (PI), Chris Coward (PI)

TEACHING & MENTORING

- Head of Directed Research Group in Developing a Digital Diary Application, Winter 2025
- Teaching Assistant for IMT 596 (Capstone II), Winter 2025
- Mentor for DUB REU program, Summer 2024 (Mentees: N. Gorkar, J. Espinosa-Briones)
- Head of Directed Research Group in Facilitating Long-Distance Connection through Gaming, Spring 2024
- Mentor for Twitch Intern program, Summer 2023 (Mentee: K. Dhamnait)
- Resident Peer Mentor at MIT, Fall 2020
- Instructor for Amazon Future Engineer, Summer 2020
- Mentor for Project Scientist, Summer 2019
- Associate Advisor at MIT, Fall 2018 to Fall 2019
- New Hampshire Girls' Math Circle, 2014-2016

RESEARCH PROJECTS

Narrative Games for Mental Health *June 2024 - present*
Mentor: J. Kientz

Conducting a systematic review of how narrative-based games are utilized in mental health contexts. Investigating use of evidence-based practices and how HCI researchers can work better with clinical practitioners. Working on creating narrative games as single-session interventions grounded in clinical research.

Affordances of Digital Games for Long Distance Romantic Relationships *January 2024 - present*
Mentor: J. Kientz

Investigated the features of digital games that help adults in long distance romantic relationships feel more connected. Conducted a diary study and a mechanics-dynamics-aesthetics activity with participants. Ran a research group to design a product or interface that can enhance feelings of connection while gaming. Wrote up a mixed-methods analysis under submission for CHI 2025 (preprint available on request).

Designing Speculative Learning Games for Data Ethics *October 2023 - present*
Mentors: B. Herman, S. Evans, C. Aragon

Investigating the use of game development as a speculative activity to teach data science ethics incorporating the Directed Research Groups (DRG) format, that decentralizes classroom dynamics, emulates real-life working environments, and offers students creative choices driven by their own interests. Paper published in ISLS 2024.

Role of Narrative in Misinformation Games *October 2023 - present*
Mentor: J.H. Lee

Created a theoretical framework for the role that narrative plays in connecting people with how they experience misinformation in gameplay settings, from a game design and game studies perspective (published in the *Harvard Misinformation Review*). Ran a randomized controlled trial to identify connection between narrative transportation and identification and misinformation learning outcomes (results under review in CHI 2025; preprint available on request).

Towards Gamified Crafting for Blind/Low Vision Youth *November 2023 - February 2024*
Led by: A. Rodriguez

Investigated values and needs around how BLV individuals can express themselves through digital crafting, with a focus on how theories of joint media engagement can be applied to collaborative game interactions between

sighted and low vision individuals. Thematic analysis and design implications published in ASSETS 2024.

Escape!Bot: Child-Robot Interaction for Creative Expression During Gameplay *January 2019 - June 2021*

Mentor: S. Ali

Created a 2D platforming game in Unity to foster creative expression in children as they played the game with an embodied socially expressive agent providing creativity scaffolding. Designed and ran a 2x2 study to determine factorial efficacy of embodiment and creative scaffolding. System and results published in CHI PLAY 2020 and Creativity and Cognition 2022.

Dancing with AI *March 2020 - May 2021*

Mentors: C. Breazeal, H. Abelson, R. Williams

Designed a middle school AI curriculum, teacher materials, and assessments focusing on movement-based AI models such as Teachable Machine, Affectiva, and Posenet. Deployed the curriculum using synchronous online learning with 40 middle school students during Summer 2020. Assessed learning gains and conducted trainings for teachers nationwide for deployment in their own classrooms. Tool design published in EAAI 2021; curriculum design published in IJAIED.

Open Collectives: Architecture for an Equitable Digital Economy *February 2020 - May 2020*

Mentors: M. Moran Jahn, S. Williams, R. Segal

Analyzed historic examples of 'collectives' and co-designed transmedia artifacts through sensory ethnographic interview with potential users. Project resulted in a display at the Venice Biennale 2021.

EXPERIENCE

Twitch **San Francisco, California**

Software Engineer II *August 2022 - September 2023*

- Self-initiated improvements to baremetal workflows, including piloting addition of integration tests to baremetal services.
- Rearchitecting legacy baremetal services using Amazon Builder Tools and AWS.

Software Engineer I *August 2021 - July 2022*

- Architected, coded, and built multi-component monitoring service for detecting abrupt drops in network traffic using AWS SQS, Kinesis, ECS, and Apache Druid.
- Designed and implemented distributed locking system for polling daemon using AWS DynamoDB.
- Wrote from scratch and maintained team's deployment runbooks, as well as several service and onboarding documents.

Software Engineering Intern *June 2020 - August 2020*

- Refactored polling protocol in Golang to receive 1.5x more data per minute at no change to costs, providing better approximation of network traffic for video system.
- Created and owned pipeline that tracks live CDN utilization metrics, using AWS Lambda, Kinesis, and CloudWatch.

MIT Media Lab (Personal Robots) **Cambridge, Massachusetts**

Research Assistant *January 2021 - June 2021*

- Deployed Escape!Bot study to 50 schoolchildren aged 5-11 in the greater New England area. Conducted study sessions with teammate, analyzed results, and published paper in ACM C&C '22.
- Co-wrote short papers and workshop posters in IDC and HRI surrounding work on social robots and creativity.
- Conducted teacher trainings for Dancing with AI curriculum, which teachers then deployed to their students around the country.

Undergraduate Researcher *January 2019 - January 2021*

- Designed and built a 2D platformer game in Unity and C# to measure creativity in elementary school children.
- Ran study sessions and compiled results for graduate student's work on creative social robots.
- Developed and piloted an interactive AI curriculum for middle schoolers through the Amazon Future Engineer program.
- Wrote curriculum and designed prototype for online textbook to teach K-12 schoolchildren about GANs.
- Helped build and maintain raise.mit.edu, the front page of MIT's multidisciplinary AI education initiative.

Education Development Center **Remote**

Curriculum Designer *December 2020 - March 2021*

- Developed data science integrated curricula for biology, physics, and chemistry.
- Co-designed lessons and activities with educators. Curricula will be used by the State of Massachusetts.

PlayStation (Santa Monica Studio) **Los Angeles, California**

Engine Programming Intern *May 2019 - August 2019*

- Revamped studio-wide debugging tool using modern rendering package to increase usability and productivity.
- Gained C++ and system design experience creating pipeline tools for a triple A video game studio.

The Education Arcade **Cambridge, Massachusetts**
Undergraduate Researcher *June 2018 - August 2018*

- Designed, prototyped, and implemented features for TaleBlazer, a location-based AR smartphone app.
- Implemented highly requested time dependent features for online editor using a Javascript frontend.

MIT Admissions **Cambridge, Massachusetts**
Admissions Blogger *September 2017 - January 2021*

- Blogged about student life to thousands of potential applicants.
- Provided feedback to MIT Admissions and act as an ambassador for MIT to the general public.

AWARDS & FELLOWSHIPS

- CERES Scholar, Jacobs Foundation, 2024-2025
- Academic All-Conference Team, Northeast Fencing Conference, 2021
- XBox Women in Gaming Scholar, 2020
- Rewriting the Code Fellow, 2019
- National Merit Scholar, 2017
- State AP Scholar and National AP Scholar, College Board, 2016
- Reischauer Scholar, Stanford University, 2016
- Japan-America Friendship Scholar, Youth for Understanding, 2016
- 2x National Semifinalist, North American Computational Linguistics Olympiad, 2015 and 2016
- Math Prize for Girls, Advantage Testing Foundation, 2015
- Distinguished Honor Roll (top 1% of test takers), American Math Competitions, 2015
- 2x AIME qualifier, Mathematical Association of America, 2014 and 2015

SERVICE

- Reviewer for: ISLS 2024, CHI 2025
- Student Coordinator for UW Digital Youth Lab, Fall 2023 to present
- Program Advisory Committee for B.S. in Computer Science and Engineering, DigiPen Institute, Spring 2023
- Intern Review Committee for Twitch University Recruiting, September 2022 to September 2023
- Technical Interviewer for Twitch University Recruiting, September 2022 to September 2023
- Educational Counselor for MIT, Fall 2021 to present

INVITED TALKS & PRESENTATIONS

- **Introduction to PoseBlocks**. GirlsInAI2021 Hackathon - India. Remote, 2021.
- **Interning Remotely**. Jameel World Education Lab (J-WEL). Remote, 2020.

SELECTED MEDIA COVERAGE

- **MIT School of Engineering**: Love of the game. [link] (student spotlight covering my undergraduate research)
- **Santa Monica Studio**: Inspiring a New Generation. [link] (interviewed as part of STEM outreach team)
- **Daily Mail UK**: [link] One of my student blog posts went infamously viral and made it to the tabloids.

SKILLS & CERTIFICATIONS

- **Skills**: Software Engineering, GoLang, Game/Interaction Design, Unity3D, Python, Java, C#, Writing, Blogging
- **Coursera Certifications**: Getting and Cleaning Data, R Programming, UW Machine Learning Certification
- **Other Certifications**: Japanese Language Placement Test N2 (full professional fluency)