Nisha Devasia

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EDUCATION

Massachusetts Institute of Technology **Cambridge, MA**
B.S. in Computer Science and Comparative Media Studies *February 2021*

- *Coursework for Computer Science:* Software Construction, Theory of Computation, Intro to Algorithms, Intro to Machine Learning, Computation Structures, Computer Systems Engineering, Intelligent Multimodal UI, Oral Communication
- *Coursework for Comparative Media Studies:* Videogame Theory, Visualizing Japan, Network Cultures, Creating Video Games, Games and Culture, Literature and Film, Civic Media Design Studio, Critical Worldbuilding, Current Debates in Media

RESEARCH PROJECTS

Escape!Bot: Child-Robot Interaction for Creative Expression During Gameplay *January 2019 - Present*
Mentors: S. Ali

Created a 2D platforming game in Unity 2D as an evaluative measure for children's creative expression during gameplay with an embodied socially expressive agent providing creativity scaffolding. Designed a 2x2 study to determine factorial efficacy of embodiment and creative scaffolding.

Dancing with AI *March 2020 - Present*
Mentors: C. Breazeal, H. Abelson, R. Williams

Designed a middle school AI curriculum 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. Developed curriculum, teacher materials, and assessment methods. Currently assessing learning gains and training school teachers to teach our curricula.

EXPERIENCE

Twitch **San Francisco, California**
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.

PlayStation (Santa Monica Studio) **Los Angeles, California**
Engine Programming Intern *May 2019 - August 2019*

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

MIT Media Lab (Personal Robots) **Cambridge, Massachusetts**
Undergraduate Researcher *January 2019 - present*

- Creating a 2D platformer game in Unity and C# to measure creativity in elementary school children.
- Designing activities and curriculum for online AI education modules in collaboration with the MIT Quest for Intelligence.

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.

Aligned Vision **Chelmsford, Massachusetts**
Software Engineering Intern *July 2015 - September 2016*

- Implemented matrix inversion and transformations for image modification.
- Verified modeling of Formula 1 cars through a statistical program in C++ to remove specified outliers.

PUBLICATIONS

- Jordan B., **Devasia N.**, Hong J., Williams R., & Breazeal C. (2021). PoseBlocks: A Toolkit for Creating (and Dancing) with AI. *Eleventh AAAI Symposium on Educational Advances in Artificial Intelligence (EAAI-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*).

TEACHING & MENTORING

Instructor for Amazon Future Engineer *June 2020 - August 2020*

- Taught Dancing with AI curriculum to approx. 40 students from underserved, Title 1 schools across the country.
- Worked with teachers through the program to iterate upon curriculum and resources.

Resident Peer Mentor, MIT *August 2020 - December 2020*

- Worked collaboratively with dormitory heads and undergraduate residential life administration to provide support for resident first-year students.

LEADERSHIP

UPOP and GEL *December 2018 - May 2020*

- Engineering leadership accelerators for sophomores and juniors. Participated in leadership labs and team building exercises.
- Learned how to be an inspiring leader and an effective teammate, and honed leadership skills through proactive practice.

Campus Preview Weekend *December 2018 - April 2019*

- Event chair responsible for dorm's freshmen orientation activities. Secured over $5000 worth of funding for 30+ events.
- Managed 50+ volunteers over 3 days, liased with external organizations, and served as a spokesperson for dormitory.

AWARDS & FELLOWSHIPS

- **XBox Women in Gaming Scholar**: Scholarship for female students and young professionals passionate about gaming. Awardees receive pass to the Game Developer's Conference.
- **Rewriting the Code Fellow** - An exclusive, year-long program for female undergraduates studying computer science and engineering who are interested in gaining applied experience in tech.
- **2016 Reischauer Scholar**: One of 25 students selected nationwide every year to participate in an in-depth analysis of Japanese history, culture, and US-Japan diplomatic relations.
- **Japan-America Friendship Scholar**: One of 70 students nationwide selected by Youth for Understanding to receive $10000 scholarship; sponsored by the Japanese government for students who have Japanese language experience or are motivated to learn Japanese.

WRITING

- **MIT Admissions Blogger** - Write blog posts about student life to showcase MIT culture to thousands of prospective students, and act as an ambassador for MIT to the general public.

SKILLS & CERTIFICATIONS

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