Aubrey Simonson

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https://aubreysimonson.gitlab.io/page/

Education

Northeastern University

September 2023-Present

College of Arts, Media and Design

Interdisciplinary PhD in Design and Media

Advisor: Professor Casper Harteveld

Massachusetts Institute of Technology

August 2019- August 2021

M.S Media Arts and Sciences

MIT Media Lab

Thesis: An Integrated System for Interaction in Virtual Environments

Advisor: Pattie Maes

Wellesley College

September 2015 - May 2019

B.A. Media Arts and Sciences

BA. Political Science

Publications

Simonson, Aubrey, Dana Gretton, and Casper Harteveld. "Bird: A Point Cursor for Virtual Immersive Environments." *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. 2025.

Simonson, Aubrey, et al. "There's Your Problem: Spatial Localization of Design Flaws in Virtual Reality Training Simulations." *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. 2025.

Simonson, Aubrey, and Guodong Shao. "An Authoring Tool for Mixed Reality Interfaces for Digital Twins in Manufacturing." *IFIP International*

Experience

Teaching Assistant

Massachusetts Institute of Technology

September 2021 - May 2024

Lectured, mentored student project teams, organized guest lectures, and helped design syllabus for:

- 9.S915: VR and the Brain
- 2.177: Designing Virtual Worlds
- 2.S972: Making Music in the Metaverse
- 2.S972: Virtualizing the Human Body
- 2.S972: Making Virtual Reality and Immersive Experiences

Part-Time Lecturer

School of the Museum of Fine Arts at Tufts University

September 2022 - December 2022

Designed and taught DIG-0150: Virtual Reality, a 14-student studio art course, and an introductory programming course as part of the SMFA Continuing Education Virtual Reality Certificate Program

Research Assistant

National Institute of Standards

May 2023 - August 2023, May 2024 - August 2024

Prototyped a mixed reality application for the development of interfaces of digital twins in advanced manufacturing settings.

Teaching Assistant

AFVS157L: Immersive Experience as Art

Harvard University

January 2022 - June 2022

Taught workshops on Unity, Blender and the Open XR Toolkit. Mentored 13 students on final projects, and organized public presentation of student work.

Undergraduate Research Assistant, MSRP Intern, Graduate Research Assistant

Scalable Cooperation, Object Based Media, Fluid Interfaces

MIT Media Lab

January 2018 - September 2021

Lead designer and programmer on Nostalgia Box, a tool using neural style transfer for reminiscence.

Developed the 8KLibrary, a tool for digitizing physical libraries. Presented the project to the MIT Media Lab community.

Lead programmer on the Volumetric Cinema Project.

Conference on Advances in Production Management Systems. Cham: Springer Nature Switzerland, 2024.

Simonson, Aubrey. "Pockets: User-assigned menus based on physical buttons for virtual environments." *ACM SIGGRAPH 2021 Posters*. 2021. 1-2.

Honors and Awards

Pamela Daniels Fellowship

Wellesley College

2018

A $3500 grant to fund student projects which demonstrate a “maverick spirit”. Used to fund Bird Noticing, a virtual reality video game about bird watching.

Graduate Fellowship for STEM Diversity

2023

Formerly known as the National Physical Science Consortium (NPSC). Graduate Fellowships for STEM Diversity (GFSD) is a partnership between federal agencies & laboratories, industry, and higher education institutions to "increase the number of American citizens with graduate degrees in STEM fields, emphasizing recruitment of a diverse applicant pool.”

Skills

Unity, C#, python, Blender, HTML, CSS, Arduino

Technology Intern

Knapp Media and Technology Center

Wellesley College Library and Technology Services

December 2015 - May 2019

Researched emerging technologies and their applications in classroom settings. Taught workshops to the student body and consulted on faculty projects.

Teaching Assistant

CS321:Mixed and AugmentedReality

Wellesley College

February 2019 - June 2019

Ran Open Lab Hours to troubleshoot student projects.