

Recent Experience

Nov 2021 **Aurelia Institute, Cambridge MA**
- Present Co-Founder & Chief Design Officer

Leads brand, design strategy, and architectural design at Aurelia Institute: a nonprofit space architecture R&D lab, education and outreach center, and policy hub dedicated to building and scaling humanity's future in space. Serves as lead for the Institute's first foray into human-scale space architecture through the development of a life-size space habitat mockup of TESSERAE — a modular, reconfigurable space architectural paradigm in development at Aurelia. The TESSERAE pavilion aims to engage designers, engineers, and the general public on the future of human life in space.

Nov 2018 **MIT Space Exploration Initiative (SEI), MIT Media Lab, Cambridge MA**
- Present Designer / Research Affiliate

Interviews astronauts and conducts qualitative research in extreme environments as Research Lead for the *Astronaut Ethnography* project, which captures the lived experiences of astronauts and cosmonauts to share them broadly with the next generation of space designers, engineers, and policy makers. In conjunction, develops and tests artifacts for creative expression in space based on astronaut data, including *Fluid Expressions*, a novel art and craft system designed exclusively for use in microgravity.

Jun 2020 **Broad Institute of MIT and Harvard, Cambridge MA**
- Nov 2021 Consulting Designer

Developed content strategy, critical flows, high fidelity designs, interaction guidelines, and accessibility design patterns across multiple genomics visualization projects as part of the PATTERN Visualization and Data Science Platform teams at the Broad Institute of MIT and Harvard.

Aug 2017 **Emerging Technology Experiences, IBM Research, Cambridge MA**
- Jul 2019 Design Researcher / UX Designer

Designed experiences that engage and educate people on the capabilities of emerging technologies. Developed design strategy, educational materials, and interactive installations for quantum machine learning and generative AI applications. Led design teams to create educational and research tools for quantum computing, including the IBM Q Composer and Qiskit SDK visualization tools.

Education

Aug 2019 **Harvard University Graduate School of Design, Cambridge MA**
- May 2021 Master in Design Studies (Technology Concentration)

Aug 2010 **Yale University, New Haven CT**
- May 2014 B.A. Architecture (Design Concentration)

Publications & Patents

- Oct 2022 **The Astronaut Ethnography Web Project: Insights from First Person Accounts of Space**
S. Sharma, N. Klop-Packel, A. Ekblaw. 73rd International Astronautical Congress (IAC), Paris, France, 18-22 September 2022.
- Jun 2022 **Do Explanations Increase the Effectiveness of AI-Crowd Generated Fake News Warnings?**
Epstein, Z., Foppiani, N., Hilgard, S., Sharma, S., Glassman, E., & Rand, D. Proceedings of the Sixteenth International AAI Conference on Web and Social Media, Vol. 16, June 2022.
- Jul 2021 **Astronaut-in-the-Loop: An Iterative Design Research Framework for Space Environments**
S. Sharma, S. Fish, A. Ekblaw. 50th International Conference on Environmental Systems, July 2021.
- May 2021 **How to Understand Your Robot: A Design Space Informed by Human Concept Learning**
S. Booth, S. Sharma, S. Chung, E. Glassman, J. Shah. International Conference on Robotics and Automation (ICRA), May 2021.
- Oct 2020 **Astronaut Ethnography: A Design Research Approach to Microgravity**
S. Sharma, S. Fish, A. Ekblaw. 71st International Astronautical Congress (IAC) – The CyberSpace Edition, 12-14 October 2020.
- Oct 2018 **Tool for understanding and facilitating the construction of quantum computing programs**
S. Sharma et al. Application EP18382686.6, filed October 2018.

Exhibitions & Events

- Jul 2023 **Panelist, “Creators in Space”**
San Diego Comic Con 2023
- Apr 2023 **Moderator, Space Architecture Panel**
Beyond the Cradle Conference, MIT Media Lab
- Oct 2022 **Presenter, Session E1-9: Space Culture**
IAF International Astronautical Conference 2022
- July 2022 **Invited Panelist, “Space Stations Near & Far”**
San Diego Comic Con 2022
- May 2022 **Moderator, New Space Age Astronaut Panel**
Beyond the Cradle Conference, MIT Media Lab
- Jul 2021 **Presenter, Session 502-D: Space Architecture**
Intl. Conference on Environmental Systems 2021
- Apr 2021 **Solo Exhibition, “Fluid Expressions”**
Kirkland Gallery, Harvard GSD
- Nov 2020 **Presenter, Session E5: Space & Society**
IAF International Astronautical Conference 2020

Recent Press

- Architecture for Inhabiting Space**
ArchDaily (written by Enrique Tovar), July 2023
- Finalist - TESSERAE Pavilion (Aurelia Institute)**
3D Pioneers Challenge, May 2023
- Arctic space analog in Svalbard**
MIT Media Lab, October 2022
- Life in space: prepping for an increasingly tangible reality**
MIT News, July 2021