



Atieh Taheri

Ph.D. Candidate in Electrical and Computer Engineering
Human-AI Integration Lab, University of California, Santa Barbara, Santa Barbara, CA 93106

 a_taheri@ucsb.edu

 <https://atiehtaheri.com>

 @atieh-taheri

 Google Scholar

 ORCID

Research Interests

Inclusive Design

Establishing design principles and strategies that cater to the needs of all users. This includes creating more inclusive digital products and services by adopting a design philosophy that not only overcomes functional limitations but also integrates sensory experiences to foster accessibility and encourage creative expression.

Assistive Technologies

Creating cutting-edge solutions that assist individuals with motor impairments, aiming to remove barriers and facilitate independent living. These technologies should consider both the practical and the emotional dimensions of user experience.

Human-Computer Interaction

Development of innovative interaction techniques that enhance the user experience and accessibility, especially for those with motor disabilities.

Education

University of California, Santa Barbara

Ph.D Candidate in Electrical and Computer Engineering

- Advisor: Dr. Misha Sra

Santa Barbara, USA
Present

University of California, Santa Barbara

M.Sc. in Electrical and Computer Engineering

- Advisor: Dr. Chiv Chandrasekaran
- GPA: 3.77/4.00

Santa Barbara, USA
March, 2019

Sharif University of Technology

B.Sc. in Computer (Software) Engineering

- Advisor: Dr. Hamid Reza Rabiee
- GPA: 18.13/20

Tehran, Iran
Sept. 2011

Work Experience

Google

Student Researcher

- Advisors: Dr. Negar Rostamzadeh, Research Scientist; Dr. Shaun Kane, Research Scientist
- *HCI and Accessibility Research Project: Accessible Text-to-Image Generation*

Mountain View, CA, USA
Aug. 2022 – Feb. 2023

Apple

Associate

- Advisor: Dr. Marco Zuliani, Computer Vision Research Manager
- *Computer Vision and Machine Learning Research Project: Exploration of inspection tools for Deep Convolutional Networks*

Cupertino, CA, USA
June 2017 – Sept. 2017

Apple

Associate

- Dr. Marco Zuliani, Computer Vision Research Manager
- *Computer Vision and Machine Learning Research Project: 3D technology for user photo libraries*

Cupertino, CA, USA
June 2016 – Sept. 2016

Magic Leap

Intern

- Advisor: Dr. Jason Wither, Senior Software Engineer
- *Simulation and implementation of stereo monochromatic camera and depth sensor*

Mountain View, CA, USA
June 2015 – Sept. 2015

Publications

Atieh Taheri*, Arthur Caetano*, Misha Sra. "Virtual Steps: The Experience of Walking for a Lifelong Wheelchair User in Virtual Reality." *2024 IEEE Conference Virtual Reality and 3D User Interfaces (VR)*, Orlando, FL, USA, 2024, pp. 168-178. DOI: [10.1109/VR58804.2024.00040](https://doi.org/10.1109/VR58804.2024.00040). [* equal contribution]

Atieh Taheri*, Carlos Gilberto Gomez-Monroy*, Vicente Borja, and Misha Sra. "MouseClicker: Exploring Tactile Feedback and Physical Agency for People with Hand Motor Impairments." *ACM Transactions on Accessible Computing (2024)*, Volume 17, Issue 1, Article No.: 5, pp 1-31. DOI: [10.1145/3648685](https://doi.org/10.1145/3648685). [* equal contribution]

Atieh Taheri, Purav Bhardwaj, Arthur Caetano, Alice Zhong, Misha Sra. "Virtual Buddy: Redefining Conversational AI Interactions for Individuals with Hand Motor Disabilities." *UIST '23 Adjunct: Adjunct Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology*, Article No.: 23, pp. 1–3, 2023, San Francisco, CA, USA, DOI: [10.1145/3586182.3616680](https://doi.org/10.1145/3586182.3616680).



Best Poster Based on People's Choice

Atieh Taheri, Mohammad Izadi, Gururaj Shriram, Negar Rostamzadeh, Shaun Kane. "Breaking Barriers to Creative Expression: Co-Designing and Implementing an Accessible Text-to-Image Interface." *Machine Learning for Creativity and Design, NeurIPS 2023 Workshop*. arXiv preprint DOI: [10.48550/arXiv.2309.02402](https://doi.org/10.48550/arXiv.2309.02402).

Atieh Taheri, Ziv Weissman, Misha Sra. "Design and Evaluation of a Hands-Free Video Game Controller for Individuals with Motor Impairments." *Frontiers in Computer Science 3 (2021), Volume 3, Article 751455, pp 1-15. Frontiers Media SA, 2021*, DOI: [10.3389/fcomp.2021.751455](https://doi.org/10.3389/fcomp.2021.751455).

Atieh Taheri, Ziv Weissman. "Designing a First Person Shooter Game for Quadriplegics." *CHI EA '21: Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*, Article No.: 493, pp. 1–6, 2021, Yokohama, Japan, DOI: [10.1145/3411763.3451850](https://doi.org/10.1145/3411763.3451850).



First-place Winner of CHI Student Game Competition

Atieh Taheri, Ziv Weissman, Misha Sra. "Exploratory Design of a Hands-Free Video Game Controller for a Quadriplegic Individual." *AHs '21: Proceedings of the Augmented Humans International Conference 2021 pp. 131–140, 2021, Rovaniemi, Finland*, DOI: [10.1145/3458709.3458946](https://doi.org/10.1145/3458709.3458946).

Awards & Honors

Awardee , People's Choice Best Poster at UIST 2023	USA
Awardee , UC Santa Barbara Doctoral Student Travel Grant	USA
First-place Winner , Student Game Competition, Category of Innovative Interfaces at CHI 2021	USA
Awardee , GHC Student Scholarship for Virtual Grace Hopper Celebration 2021	USA
Awardee , Fellowship for Outstanding Academics at UC Santa Barbara's Electrical and Computer Engineering Dept. 2021	USA
Recognized , Outstanding Lower-Division Italian Student at UC Santa Barbara's Dept. of French & Italian 2020	USA
Recognized , Outstanding Lower-Division Italian Student at UC Santa Barbara's Dept. of French & Italian 2019	USA
Awardee , Fellowship at UC Santa Barbara's Electrical and Computer Engineering Dept. 2014	USA
Awardee , Fellowship of Exceptional Talents at Sharif University of Technology 2011	Iran
Ranked 2nd , Cumulative GPA among B.Sc. students in Software Engineering Major at Sharif University of Technology 2011	Iran
Ranked 6th , Cumulative GPA among all B.Sc. students in Computer Engineering at Sharif University of Technology 2011	Iran
First-place Winner , Internship Project Competition at Sharif University of Technology's Mobile Value-Added Services Lab	Iran

Technical Skills

Programming Languages	C/C++, Python, MATLAB, HTML, CSS, JavaScript	Libraries & Frameworks	PyTorch, Tensorflow, Keras, OpenCV, OpenGL
Game Design & Graphics	Unity 3D, Unreal Engine	Database Technologies	SQL, MongoDB

to Volunteer Experience & Leadership

Co-organizer, Ethical Considerations in Creative Applications of Computer Vision (EC3V) Workshop, CVPR, 2023-2024

Master's Thesis Committee Member, Contributed expertise to the evaluation and guidance of an MDes student's thesis project, University of Washington

Area Chair, Women in Machine Learning (WiML) Workshop, NeurIPS 2019

Fundraiser, Raised Money for Working on Walking (WoW) Foundation Supporting Spinal Muscular Atrophy (SMA), 2017