Logan C. Stevens

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EDUCATION

University of Maryland, College Park, MD, USA

| • Doctor of Philosophy (Ph.D.) — Computer Science, 4.0 GPA | Jan. 2024 – Present |
|--|------------------------------|
| — Research Interests: Human-computer interaction (HCI), extended/virt | ual/augmented reality (XR) |
| VR/AR), psychophysics, computer graphics, learning science | |
| — Advisor: Dr. Jun Nishida | |
| • Bachelor of Science — Computer Science, Honors, 3.75 GPA | Jan. 2020 – Dec. 2023 |
| • Bachelor of Arts — Theatre, 3.75 GPA | Jan. 2020 – Dec. 2023 |
| Harford Community College, MD, USA | |
| • Associate of Science — Computer Science, Honors, 3.67 GPA | Aug. 2017 – Aug. 2019 |
| Research Experience | |
| EmD Lab, University of Maryland, College Park | Oct. 2024 – Present |
| Research Assistant (Advisor: Dr. Jun Nishida) | |
| • Diminished Reality Research Project | |
| Conducting response on learning and applied human responsion for arter | 1 . J J. J J |

Conducting research on learning and applied human perception for extended and diminished reality.

The Driskell Center, University of Maryland, College Park Mar. 2024 – Aug. 2024
Research Assistant & Software Developer (Advisors: Dr. Giacinto Paolo Saggese & Dr. Jordana Moore Saggese)
Lead Platform Architect for Myseum System

Led software implementation for a research project experiencing artworks in XR. Features include handling high-resolution art pieces, virtual environment creation, and accessibility. [Demo Video Link]

GAMMA Lab, University of Maryland, College Park Jun. 2020 – Dec. 2024 Research Assistant (Advisor: Dr. Dinesh Manocha)

• Redirected Walking Thresholds Research Project Leads software implementation for investigating human perception and accurately estimating users' thresholds for tolerance of visual gains in VR using the Unity engine and C#. [Demo Video Link]

• XR and Education Analysis Research Project

Designed an interactive lecture hall virtual environment and input interface using the Unity Engine and C# for research in XR educational telepresence and its effects. [link]

Small Artifacts Lab, University of Maryland, College Park Aug. 2022 – Dec. 2022 Student Researcher (Advisor: Dr. Huaishu Peng)

• VR RT²: VR-Integrated Real-Time RaceTrack Simulator Used computer vision, the Unity Engine, and custom C# scripts, to create a system that converts a physical racetrack model to an interactive VR-simulated racing environment in real-time. [Link]

MIND Lab, University of Maryland, College Park

Student Researcher (Advisor: Dr. Ashok Agrawala)

• AR and Building Analytics and Maintenance Project Integrated AR support for inbuilt sensors, analytics, and maintenance for the UMD Iribe building using Unity, MRTK, and ArcGIS in collaboration with the UMD MIND Lab. [Link]

Jan. 2022 – May 2022

Jan. 2022 – May 2022

Google exploreCSR Program, Brown University

Visiting Researcher (Advisor: Dr. James Tompkin)

• "Artificial Intelligence and the Arts: Towards AI-Guided Accessible Learning Spaces in Virtual Reality" Research Project

Investigated the potential for AI integration in accessibility-enhancing techniques in XR. Presented findings and demos at the 7th Annual Brown Undergraduate CS Research Symposium where the project placed top three. [Poster Link] [Demo Video Link]

PAPERS & POSTERS

- * = Equal contribution
- (1) C Chen, S Beland, I Burghardt, J Byczek, WJ Conway, E Cotugno, S Davre, M Fletcher, R Kumar Gnanasekaran, K Hamilton, J Heustis, A Ingalls, T Jha, E Klein, H Kramer, A Leitch, J Perkins, C Sherman, C Sterrn, L Stevens, R Zarrella, J Golbeck. Cross-Platform Violence Detection on Social Media: A Dataset and Analysis. (To appear) Proceedings of the 17th ACM Conference on Web Science (WebSci 2025)
- (2) NL Williams, LC Stevens, A Bera, D Manocha. Sensitivity to Redirected Walking Considering Gaze, Posture, and Luminance. (To appear) IEEE Transactions on Visualization and Computer Graphics, 2025 (Proc. IEEE VR 2025)
- (3) L Stevens*, E Childs*, F Mohammad*, H Burbelo, A Awoke, N Rewkowski, D Manocha. An Overview of Enhancing Distance Learning Through Augmented and Virtual Reality Technologies. *IEEE Transactions on Visualization and Computer Graphics (TVCG 2023) & IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2024)* [arXiv Link] [TVCG Link]
- (4) L Stevens, LA Weissman, J Steigelman, M Bouabid. Artificial Intelligence and the Arts: Towards AI-Guided Accessible Learning Spaces in Virtual Reality. 7th Annual Brown University CS Research Symposium [Top three research project] [Poster Link] [Demo Video Link]

TEACHING EXPERIENCE

| Computer Science Instructor and Instructional Designer Jan. 2023 – Dec. 2023 | 3 | |
|--|----|--|
| University of Maryland, College Park - Department of Computer Science | | |
| • Instructor and instructional designer for the courses: | | |
| • CMSC388Y: History of Computer Science and Digital Technologies. [Link] | | |
| • CMSC398N: Ethics in Computer Science. [Link] | | |
| • Delivered lectures and facilitated discussion for a full roster of undergraduate computer science students | s. | |
| • Developed course curriculum, content, and assignments of various types (coding, written, oral, etc.). | | |
| Computer Science Ambassador & Tutor Aug. 2021 – Jan. 202 | 3 | |
| University of Maryland, College Park - Iribe Initiative for Inclusion and Diversity in Computing (I4C) | | |
| • Planned and taught a K-12 curriculum and created engaging lessons in-person, remotely, and hybrid. | | |
| • Assisted in programming languages, troubleshooting, effective study habits, and understanding concepts | s. | |
| Assistant Instructional Designer Jan. 2022 – May 2022 | 2 | |
| University of Maryland, College Park - Department of Computer Science | | |
| • Employed pedagogical techniques to design the Teaching Techniques for Computer Science course. | | |
| MicroMasters Course Program Facilitator Jun. 2021 – Aug. 202 | 21 | |
| University of Maryland, College Park - Robert H. Smith School of Business | | |
| • Engaged with external stakeholders and campus partners to gather data from various sources (Tableau, | , | |
| edX, Qualtrics) to produce and deliver course-specific metrics and insights. | | |
| \bullet Served as teaching assistant and tech. lead/producer for live faculty webinars. | | |
| • Performed quality assurance tests within each course. | | |
| Instructional Design Intern Jun. 2020 – May 202 | 1 | |
| University of Maryland, College Park - Office of Transformational Learning | | |
| • Conducted inter-departmental pedagogical research to present insights to university instructors. | | |
| \bullet Designed frontend LMS paradigms to create accessible learning experiences for online students. | | |
| Teaching Assistant Jul. 2020 – Dec. 202 | 20 | |
| University of Maryland, College Park - Department of Letters & Sciences | | |
| • Represented the UMD Transfer Student Community as a leader and created course content. | | |
| Computer Science & Mathematics Learning Assistant Sep. 2019 – Jan. 202 | 20 | |
| Harford Community College | | |
| • Supported peers with material for a variety of STEM courses from assembly programming to calculus. | | |

INDUSTRY EXPERIENCE

Research Scientist

U.S. Naval Research Laboratory

• Builds custom software tools for use in computer graphics and robotic simulations.

AR/VR Engineering Intern

Corning Incorporated

- Facilitated debugging issues across AR/VR services at all component levels.
- Utilized the Spatial.io platform to facilitate collaboration between clients and engineers.

SKILLS

Computing Skills

C#, C++, C, Computer Vision, Unity Engine, Oculus/Meta Quest, Microsoft HoloLens, Mixed Reality Toolkit (MRTK), Java, Assembly Language (x86 & AVR), Python, R, git, HTML, CSS, JavaScript,

MATLAB, Wolfram Mathematica, Jira, Asana, Canvas/ELMS, edX LMS, ${\rm IAT}_{\rm E}{\rm X}$

Subjects

Extended/Virtual/Augmented reality (XR/VR/AR), spatial computing, human-computer interaction, psychophysics, computer graphics, virtual environments, instructional design, learning science, education

PROFESSIONAL SERVICE & COMMUNITY INVOLVEMENT

Student Representative - Education Committee

University of Maryland, College Park - Department of Computer Science

• Peer-elected to represent the UMD Computer Science student body. While advising the Computer Science Department on decisions regarding academic program administration.

Computer Science Student Advisory Board Co-Chair

University of Maryland, College Park - Department of Computer Science

• Represents and advocates for the UMD Computer Science student body while working with department leadership on issues pertaining to academics, diversity and inclusion, and student support.

Undergraduate Senator - UMD Senate

University of Maryland, College Park

• Peer-elected as an undergraduate senator to advise the University President and represent the 6,000+ undergraduates in the College of Computer, Mathematical, and Natural Sciences.

AWARDS & HONORS

| NSF Graduate Research Fellowship Program (GRFP) Competition 2025: Honorable Mention | Apr. 2025 |
|---|------------|
| UMD Graduate School International Conference Student Support Award (ICSSA) | |
| Jacob K. Goldhaber Award | Mar. 2025 |
| UMD Computer Science Department Award for Teaching Excellence 2023-2024 [Link] | Sep. 2024 |
| 2024 Diversity Conference Award | Jun. 2024 |
| XR Access Symposium Scholarship | May 2024 |
| Clifford & Camille Kendall Computer Mathematical & Natural Sciences Scholarship | Aug. 2023 |
| 2022 Diversity Conference Award | Oct. 2022 |
| Google exploreCSR Research Award (Brown Undergraduate CS Research Symposium) | May 2022 |
| oSTEM 2020 Hackathon Winner | Nov. 2020 |
| 2020 Diversity Conference Award | Aug. 2020 |
| Betty Beckley Award | Jul. 2020 |
| Bel Air Rotary Club Scholarship | Jan. 2019 |
| Kenneth & Patricia Perluke Foundation Scholarship | Sep. 2018 |
| Jordan Family Endowment Scholarship | Aug. 2018 |
| | |

MEDIA COVERAGE

• 50 Queer Scientists - oSTEM at UMD [Link]

• 'The future belongs to you' - Baltimore Sun [Link]

 \bullet Incoming students get acclimated during iPrep week - Baltimore Sun $[\underline{\mathrm{Link}}]$

Feb. 2025 – Present

Jun. 2023 – Aug. 2023

Aug. 2023 – Present

Feb. 2023 – Present

Mar. 2021 – Mar. 2022