Noushin Jamaatlou

Ph.D. Candidate
njamaatl@gmu.edu
Jamaatlou.com | linkedin.com/in/noushin-jamaatlou/

I am a Ph.D. candidate in Human Factors and Applied Cognition, with a Bachelor's and Master's degree in Psychology and an Associate degree in Software Engineering. My research centers on embodiment and perspective-taking in virtual reality (VR) for human-robot interaction (HRI). I bring expertise in experimental design, cognitive engineering, usability research, and statistical analysis, along with hands-on experience in VR development, robotics, and human factors. With a strong foundation in programming, I am highly motivated to learn new technologies and adapt quickly to innovative, fast-paced environments.

Education

Ph.D., Human Factors and Applied Cognition Dec 2025 (expected)
George Mason University, Fairfax, VA
Dissertation: *Embodiment in VR as a tool to intensify the readiness and willingness to take the visual and affective perspective of robots*

M.A., Human Factors and Applied Cognition Dec 2020
George Mason University, Fairfax, VA

Work Experience

Graduate Research Assistant Feb 2017 - Present
George Mason University

- Conducted literature reviews to support experimental design and IRB proposals across multiple human-subjects studies.
- Programmed experimental stimuli using MATLAB for a Toyota-funded Advanced Driving Assistance System (ADAS) project, and conducted data collection using a driving simulator, EEG, and heart rate monitoring equipment.
- Designed and ran a full-cycle human-robot interaction study using the NAO robot, developing the stimuli with Python and Choregraphe software, and conducting analysis in MATLAB.
- Initiated and managed multiple online and VR-based research projects from 2020 onward, contributing to study design, stimulus implementation, participant recruitment, data cleaning, analysis, and report writing.
- Designed and conducted approximately 10 VR-based user studies in Unity involving ~800 participants, managing a team of research assistants and overseeing stimuli implementation, participant logistics, data cleaning, analysis, and final reporting.
- Developed proficiency in Unity and VR-based experiment design, with a focus on embodiment, human-robot interaction, and perspective-taking.

Projects

George Mason University
Usability & Research Competitions

- Transurban Customer Platform: A Usability-Driven Redesign (Usabilathon, 2nd place) Mar 2025
- Drone Prototyping workshop (2nd place) Apr 2023
- HelloFresh Mobile App Redesign Challenge (Usabilathon) Nov 2022
- Diversity Design Challenge (Usabilathon) May 2019
- Adaptive Tae Kwon Do (ATKD) Website Redesign Competition (1st place) Apr 2019

Workshop & Class Work

- Designing a Language Learning App Spring 2020
- Improving Consumer Engagement for Zara Online Shopping Fall 2022

**See full project details at jamaatlou.com

Publications/Presentations

- **Jamaatlou, N.**, Svancara, C., Pithayarungsarit, P., Tafesse, H., McDonald, C., Wiese, E., & Roesler, E. (2024). *From screen to scene: Using video vs. virtual reality in human-robot visual perspective-taking.* Presented in the Late Breaking Results (LBR) section at ASPIRE — the HFES International Annual Meeting, Phoenix, AZ.
- **Jamaatlou, N.,** McDonald, C., Wiese, E., & Roesler, E. (under review). *Breaking the illusion: Is spontaneous visual perspective-taking in human-robot interaction just a methodological artifact?* Manuscript under review at *International Journal of Social Robotics*.
- **Jamaatlou, N**., Svancara, C., McDonald, C., Wiese, E., & Roesler, E. (in preparation). *The influence of robot in-group homogeneity on perspective-taking during body ownership illusion in human-robot interaction.* [Manuscript in preparation].
- **Jamaatlou, N**. (2025, April). *Embodiment in VR as a tool to intensify the readiness and willingness to take the visual and affective perspective of robots.* Talk presented at the Brown Bag Seminar, Department of Psychology, George Mason University.

Awards & Honors

- Doctoral Research Scholars Award, George Mason University 2024 – 2025
  - Selected for a competitive full-time Graduate Research Assistantship.
  - Supported research activities 20 hours/week with a stipend of $25,000

Leadership & Mentorship

George Mason University 2020 - Present

- Supervised and mentored five graduate students and one honors undergraduate student, fostering their academic growth and contributing to collaborative research efforts
- Led students and instructed various psychology courses, including Statistics in Psychology, Cognitive Psychology, Forensic Psychology, and Mental Illness and Criminal Justice.

Relevant Skills

Core Methods: Experimental Design, Hypothesis Testing, Data Visualization, Recruitment.
UX Methods: User Interviews, Usability Testing, Survey Design & Analysis, A/B Testing, Heuristic Evaluation, Card Sorting, Competitor Analysis, Cognitive Walkthroughs, Task Analysis, Stakeholder Interviews, Persona Development, Wireframing (Figma, Axure).
Statistical Analyses: ANOVA, T-tests, Chi-squared test, Correlation, Regression, Bayesian methods, Longitudinal data analysis.
Software & Tools: SPSS, Unity, Qualtrics, Inquisit, Overleaf, E-Prime, PsychoPy, Choregraphe (Nao robot).
Programming Language: R, Python, MATLAB, C#.