# Sara Harader

# Arlington, TX sara.harader@uta.edu

#### **EDUCATION**

The University of Arizona

Tucson, Arizona

Bachelor of Science in Neuroscience and Cognitive Science

May 2025

Hakim Sabzevari University (Formerly known as "Sabzevar Teacher Training University")

Sabzevar, Iran

Bachelor of Arts in English Language and Literature

Feb 2011

#### WORK EXPERIENCE

#### The University of Texas at Arlington

Arlington, TX

Researcher/Lab Manager (Full-time)

Oct 2025 - Present

Principal Investigator: Steven Weisberg, Ph.D.

- Facilitate lab business: recruiting participants, organizing and documenting data storage and backups
- Facilitate projects: IRB protocol submissions, managing human subject payments, running experiments
- Develop and maintain documentation, including lab experimental and consent protocols, fMRI administration checklists

### RESEARCH EXPERIENCE

#### University of Arizona, Human Spatial Cognition Lab

Tucson, AZ

Research Technician, Research Assistant, UBRP Scholar (Full-time),

Senior Capstone Project

Jan 2024 – Aug 2025

Principal Investigator: Arne Ekstrom, Ph.D.

- Designed and implemented a novel experimental protocol to investigate the effect of crossing paths on human path integration using Unity Game Engine.
- Recruited and scheduled research participants.
- Conducted data acquisition, preprocessing, and statistical analyses, including heading direction error, episodic memory richness, and eye-tracking data (MATLAB).
- Scored neuropsychological test batteries.
- Applied the Levine Grading Method to assess memory during spatial navigation in desktop VR.
- Collaborated with lab members to support multiple studies.
- Manuscript in preparation based on capstone project investigating the effect of crossing trajectories on path integration.

#### Research Project

#### PSYS 404: Spatial Navigation, University of Arizona

Tucson, AZ

Independent Class Project

Jan 2024 – Apr 2024

- Developed a novel experiment (backward vs. forward walking) to investigate path integration in humans.
- Acquired and analyzed data and presented the results to faculty and peers.

### **MANUSCRIPTS**

Harader S.A., Vishwanath, A., Gin, M.K., Watson M.F., Wilson, R.C., Ekstrom A.D. Angular Path Integration Across Different Intersecting Circular Path Configurations. Manuscript in preparation.

# **PRESENTATIONS**

Harader S.A., Vishwanath, A., Gin, M.K., Watson M.F., Ekstrom A.D. (2025, May). What Happens When We Cross Our Path. University of Arizona Neuroscience Poster Forum.

Tucson, Arizona Harader S.A., Watson M.F., Gin, M.K., Ekstrom A.D. (2025, Jan). What Happens When We Cross Our Path. Undergraduate Biology Research Program Conference.

Tucson, Arizona

# **SKILLS**

**Programming:** Experience in C++, beginner in MATLAB, Python

Software: First experiences with Unity Game Engine, Adobe Photoshop, Adobe Illustrator, MS Office

Languages: Persian (native), English (C2)