# Xinyue (Sherry) An

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**EDUCATION** 

Northwestern University Sep 2022 – Present

Ph.D. student in Neuroscience

Emory University Aug 2019 – Jun 2022

B.S. Neuroscience & Behavioral Biology (summa cum laude), B.A. Computer Science

University of California, San Diego Sep 2018 – Jun 2019

**RESEARCH EXPERIENCES** 

Northwestern University, Glaser Lab Chicago, IL

Principal Investigator: Joshua I. Glaser, Ph.D.

June 2023 – Present

Emory University, Berman Lab Atlanta, GA

Principal Investigator: Gordon J. Berman, Ph.D. May 2021 – Jun 2022

Honors Thesis: Using deep-learning based approaches to quantify Drosophila behaviors.

• Presented a video analysis pipeline that incorporates an animal pose tracking tool, an autoencoder, and a dimensionality reduction technique to identify *Drosophila* behaviors in an unsupervised manner and characterize the optogenetic activation phenotypes of descending neurons.

### Enhanced Learning and Instructional Technologies at Emory (ELITE)

Atlanta, GA

Principal Investigator: Davide Fossati, Ph.D.

Aug 2020 - Jun 2022

Research Topic: Automatic assessment of Turtle graphics with vector approach.

• Developed a java automated assessment tool for vector images (Turtle graphics) that quantifies and highlights differences between student answers and the answer key and is readily employed as an autograder in introductory computer science courses.

#### **PREPRINTS**

Zimnik AJ, Cora Ames K, An X, Driscoll L, Lara AH, Russo AA, Susoy V, Cunningham JP, Paninski L, Churchland MM, Glaser JI (2024). "Identifying interpretable latent factors with Sparse Component Analysis." bioRxiv.

#### **CONFERENCE ABSTRACTS**

An X, Chowdhury RH, Glaser JI (2024). "Dissociation of efference copy and afferent feedback signals in somatosensory cortex." Computational and Systems Neuroscience (Cosyne).

#### **TALKS & POSTERS**

Dissociation of efference copy and afferent feedback signals in somatosensory cortex	2024
Poster, Computational and Systems Neuroscience (Cosyne)	
Kinematic analysis of climbing initiations using limb tracking	2023
Poster, NUIN Admissions Poster Session, Northwestern	
Using deep-learning based approaches to quantify Drosophila behaviors	2022
Talk, Undergraduate Research Symposium, Emory	

#### **HONORS & AWARDS**

Highest Honors Thesis in Neuroscience and Behavioral Biology, Emory	2022
Revelle College Provost Honors, UCSD	2019

#### **TEACHING**

Teaching Assistant, Fundamentals of Neuroscience, Northwestern	Winter, 2024
Teaching Assistant, Molecular and Cellular Processes Laboratory, Northwestern	Fall, 2023
Teaching Assistant, Artificial Intelligence, Emory	Spring, 2022

### **EXTRACURRICULAR ACTIVITIES**

Emory Undergraduate Journal Club, presenter	2021 - 2022
Emory International Pre-health Association, mentor	2021 - 2022
UCSD Medical Literature Society, columnist	2018 - 2019

## **SKILLS**

Programming: Python, MATLAB, Java, R, C

Language: English (bilingual proficiency), Chinese (native), Korean (elementary)