

## SUMMARY

*CSE PhD student at UCSC under Tyler Sorensen studying GPU performance models, computer graphics and GPGPU programming at the intersection of architecture and programming.*

## PUBLICATIONS

- Levine, Reese, et al. "GPUHarbor: Testing GPU memory consistency at large (experience paper)." Proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis, 2023, <https://doi.org/10.1145/3597926.3598095>.
- McKee, Devon, and A. Pasha Tabatabai. "Mexican Jumping Beans Exhibit Diffusive Motion." Physical Review E, vol. 107, no. 1, 2023, <https://journals.aps.org/pre/abstract/10.1103/PhysRevE.107.014609>

## EXPERIENCE

### University of Santa Cruz, CSE Dept.

Santa Cruz, CA

*Graduate Student Researcher and Graduate Teaching Assistant*

*Sep 2022 – Present*

- Participated in and managed multiple research projects for the purpose of eventual publication relating to GPU performance modeling, on-device synchronization and memory models.
- Assisted in administering courses in parallel programming, compilers, and introductory Python.

### Apple

Cupertino, CA

*GPU Software Intern*

*Jun 2023 – Sep 2023*

- Expanded critical features for internal performance tooling as part of Apple Silicon GPU Driver Performance team.
- Evaluated GPU workloads on emerging architectures and made notable contributions to preexisting work.
- Participated in cross-architectural heterogeneous performance investigations.

### Tab Lab, Seattle University Physics Dept.

Seattle, WA

*Research Assistant*

*Apr 2021 – Jun 2022*

- Facilitation of data collection, analysis, and extrapolation for research including use of computer vision techniques for data analysis.

### Seattle University Computer Science Dept.

Seattle, WA

*Teaching Assistant*

*Jan 2020 – Jun 2022*

### Rhino Security Labs

Seattle, WA

*Automation Intern*

*Jan 2020 – Jan 2022*

- Development and design of internal automation tools across various enterprise platforms and web technologies.

### Resource for Biocomputing, Visualization, and Informatics, UCSF

San Francisco, CA

*Software Engineering Intern*

*Jul 2018 – Oct 2018*

- Major development work on Adelson Mass Spec System (AMaSS), formerly MSWeb, a web-based tool for analysis of mass spectrometry data.

### Outpost Games

South San Francisco, CA

*Intern*

*Sep 2016 – Nov 2017*

## EDUCATION

### University of California Santa Cruz

Santa Cruz, CA

*Doctor of Philosophy, Computer Science and Engineering*

*Sep. 2022 – Jun 2027 (Expected)*

### Seattle University

Seattle, WA

*Bachelor of Science, Computer Science, minor in Studio Art*

*Sep 2018 – Jun 2022*

### Hillsdale High School

San Mateo, CA

*High School Diploma*

*Aug 2014 – Jun 2018*