

SUMMARY

CSE graduate student interested in GPU programming, computer graphics, GPGPU, heterogeneous systems, high-performance computing, and research-driven development.

SKILLS

Languages: C/C++, C#, Python, Rust, GLSL, WGSL, JavaScript, Java

Technical Frameworks & Tools: OpenGL, Vulkan, CUDA, WebGPU, Flutter, AWS, OpenCV

Classes: Computer Graphics, Compiler Design, Parallel Programming, Computer Architecture, Artificial Intelligence

PUBLICATIONS

- 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>

PROJECTS

lethe: Segmented level-of-detail mesh rendering system based off of Unreal Engine's Nanite, using GPU synchronization to examine memory consistency model behavior, in progress

tekhne/hybris: Simple transpiler from CUDA → WGSL as part of efforts to translate Rodinia GPU benchmark to WebGPU, and a web interface to

falling-sand-cubed: A 3D falling-sand type game using OpenGL compute shaders for grid processing.

EXPERIENCE

University of Santa Cruz, CSE Dept.

Teaching Assistant

Santa Cruz, CA

Sep 2022 - Present

- Assisted in administering courses in parallel programming and introductory Python.

Tab Lab, Seattle University Physics Dept.

Research Assistant

Seattle, WA

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.

Teaching Assistant

Seattle, WA

Jan 2020 - Jun 2022

Rhino Security Labs

Automation Intern

Seattle, WA

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

Software Engineering Intern

San Francisco, CA

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

Intern

South San Francisco, CA

Sep 2016 - Nov 2017

EDUCATION

University of California Santa Cruz

Master of Science, Computer Science and Engineering

Santa Cruz, CA

Sep. 2022 - Jun 2024 (Expected)

Seattle University

Bachelor of Science, Computer Science, minor in Studio Art

Seattle, WA

Sep 2018 - Jun 2022

Hillsdale High School

High School Diploma

San Mateo, CA

Aug 2014 - Jun 2018