Nathaniel Flores

Williamstown, MA, USA
nsf1@williams.edu linkedin.com/in/nsflores/ nsf.name

Education

Williams College **Expected June 2027**
Bachelor of Arts in Geosciences *Williamstown, MA*

Columbia University (Kyoto Consortium for Japanese Studies) **June - July 2024**
Summer intensive language course at Doshisha University campus *Kyoto, Japan*

Relevant Coursework

- Climate Modeling
- Storage Systems
- Carbon
- Mastering GIS
- Remote Sensing
- GPU Programming
- Cryosphere
- Computer Organization

Experience

Williams Students Online **September 2024 – Present**
Club President *Williamstown, MA*

- Designed and implemented a completely new mobile app for the college, with over 2,000 active weekly users
- Identified and fixed system state problems with Ansible and Docker, automating backup & restore of server infrastructure, achieving over 99% uptime and automated deployment of the production software environment
- Collaborated with college IT and course registrar to port popular features from WSO to internal college infrastructure

GEOS 290: Data Analysis in Earth Science **February 2026 – May 2026**
Teaching Assistant *Williamstown, MA*

- Mentored students in essential programming languages such as R, Python, and MATLAB and taught key mathematical concepts from calculus, linear algebra, and differential equations
- Ran weekly office hours and graded student work in a timely manner, providing code style feedback

GEOS 274: Spatial Analysis & Environmental Change **August 2025 – December 2025**
Teaching Assistant *Williamstown, MA*

- Co-authored brand-new curriculum on using spatial statistics for geoscience majors, with a focus on industry-standard technologies such as Google Earth Engine and building coding skills
- Ran regular office hours and did weekly meetings to continue adapting course to student feedback

Research

University at Buffalo ACT Hydro Lab (NSF REU) **May 2025 – August 2025**
Research Assistant *Buffalo, NY*

- Wrote High Performance Computing code with industry-standard Python libraries for a 128-core supercomputer
- Analyzed climate model outputs to investigate the changing role of runoff in Arctic regions under climate change
- Presented research findings at AGU 2025; working to publish results in paper at a later date

Leadership / Community Involvement

Geosciences Student Advisory Committee **September 2024 – Present**
Board Chair *Williamstown, MA*

- Coordinated and executed initiatives & events to increase the student diversity of the major
- Oversaw networking and informational sessions on the department's course offerings
- Advised students on how to apply for REUs and summer opportunities

Computer Science Student Advisory Committee **October 2025 – Present**
Class of '27 Major Representative *Williamstown, MA*

- Built community through monthly student-faculty events and student activies
- Advocated to faculty for more computer science education in the physical sciences
- Improved first-year access to hands-on computer science opportunities around campus

Technical Skills

Technical Areas: GIS, Full-Stack Development, Systems Programming, HPC, DevOps
Programming Languages: Python, MATLAB, R, Swift, Java/C#, C, Fortran, Bash
Foreign Languages: Japanese (Intermediate, approx. N3), Spanish (Beginner, heritage speaker)
Certifications: FCC General Class Amateur Radio License, Wilderness First Aid & CPR (SOLO School)