

Profile

Computer Science graduate with a year of AI/Data Science research experience. I'm passionate about Graphics Programming, Web Development and Machine Learning. Check out my website: joshortner.github.io.

Education

Middle Tennessee State University - Murfreesboro, TN
B.S. Computer Science - 3.45 GPA

Skills	Languages	Software	Methods
	C/C++, Python, Go, JavaScript, HTML/CSS, C#, x86 Assembly	Git, Visual Studio, GNU Compiler Tools, CMake, OpenGL, OpenCL, CUDA, OpenCV, Earth Engine	OOP, DRY, MVC, Event Driven Architecture, Parallel/Asynchronous Programming

- Experience

Los Alamos National Lab

Research Intern

Space Data Science and Systems Division

August 2021 - Decemeber 2021

 - Designed algorithms to model the spectral patterns in satellite imagery
 - Wrote Python modules to implement novel image analysis algorithms
 - Utilized GitHub for version control and collaboration with
 - Used Google’s Earth Engine Python and JavaScript API's to gather geospatial data
 - Spoke about my work to a group of fellow interns and Professional Scientists
 - Wrote a research paper documenting the project and it's results
- Oak Ridge National Lab

Research Intern

Computational Science and Engineering Division

January 2021 - April 2021

 - Worked with a Research Scientist to define the scope of a semester long project
 - Designed and implemented a data pipeline:
 - Integrated large datasets from multiple sources
 - Designed a pipeline for preprocessing
 - Developed Python modules for Machine Learning analysis
 - Implemented a full-stack proof of concept image analysis application using:
 - Python’s Flask library
 - The Jinja html template engine
 - JavaScript/HTML/CSS
 - Produced a paper documenting my research and its context within related literature
 - Presented a poster and software demo to a group of Research Scientists
 - Project details link: <https://github.com/joshortner/ORNL-SULI-AI4HDR>