Scott Burgert

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ACADEMICS:

Stony Brook University: Currently pursuing a bachelors in Computer Science and Applied Mathematics. GPA: 3.66 **Suffolk County Community College:** Made Deans List during transfer to SBU

AWARDS AND AFFILIATIONS:

Stony Brook University:

- Deans List: Earned in 2020-2023
- Computer Science Honors: Enrolled in 2020
- Funniest Hack Award at SBU Hacks: Earned in 2022
- Game Dev Award at SBU Hacks: Earned in 2024

OpenSauce: Exhibitor in 2024

Suffolk County Community College Deans List: Earned in 2020

EXPERIENCE:

Research And Development Internship, Kitware Inc.: May 2023 - August 2023

Worked with researchers and industry experts to contribute to DARPA be making improvements to Danesfield, a tool that generates 3d representations of terrain from satellite imagery and segments buildings from terrain.

Computer Vision Research Assistant, Stony Brook University NY: January 2022 – August 2022

Collaborated with a team of researchers to design and implement a real time light field camera calibration algorithm for use in autonomous vehicles. This required knowledge in Computer Vision, C++, OpenCV and networking.

Computer Vision R&D Internship, Kitware Inc.: May 2021 – August 2021

Worked with researchers and industry leaders of Computer Vision to improve KWIVER, the industry standard toolkit for analysis of video and images, and TeleSculptor, a program that uses multiview geometry to generate a 3D representation of a landscape given aerial footage. This required knowledge of Computer Vision, software engineering concepts and C++.

Programming Languages Research Assistant, Stony Brook University NY: August 2018 – August 2021

Single handedly ported the Prolog XSB interpreter to Web Assembly, allowing students to run Prolog in their client instead of running on a server. This project requires knowledge in the Emscripten build system, networking, and compilers.

Augmented Reality Research Assistant, Stony Brook University NY: March 2020 - September 2021

Developed new techniques in Augmented Reality user localization. This project requires knowledge in computer vision, computer graphics and machine learning.

Applied Mathematics Research Assistant, Stony Brook University NY: January 2021 - August 2021

Working with a team of PhD students and undergraduate researchers to find ways to significantly speed up the simulation of blood platelets with one of the most powerful supercomputers in the world. This research requires knowledge in machine learning, parallel computing, molecular dynamics and algorithms.

Computer Science Teaching Assistant.: August 2023 – December 2023

Helping to teach an introductory CS course by directing a lab required by the students taking it and grading assignments. The course covers concepts such as data structures, recursion and basic algorithms and implementation of those concepts with Python.

Virtual Reality Research Assistant, Stony Brook University NY: March 2024 - August 2024

Developed new interactive techniques for CAVE displays with off axis rendering and tracking. Used Unity3D & OpenCV.

PROFICIENCIES:

Languages: C++, Python, C#, Java, Javascript, Bash, Mathematica, Matlab, R, ML, CSS 3.0 and HTML 3.0, Prolog Tools and Libraries: OpenCV, Numpy, Scipy, Unity3D, Unreal Engine, PyTorch, OpenGL, Scikit Image, Juce, Open Frameworks, Arduino, Android API, Node JS, JQuery, Socket.io, Emscripten, Web Assembly, KWIVER