Jack Schofield

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Objective

Computer Science graduate with a strong background in simulation programming and robotics. I'm looking to start my career in software development in a role where I can collaborate with talented peers, make meaningful contributions, and continue to grow my technical skills.

Education

Bachelor of Science in Computer Science
Oregon State University College of Engineering, August 2023
- Graduated Summa Cum Laude, GPA 3.89
- Applied focus in Simulation and Game Programming

Projects

Patient Monitoring Robot
Website: pmr-osu.github.io
Repository: github.com/schofija/patient-monitoring/
- Robot designed to monitor the health of assisted living patients. Follows the patient and detects abnormal motions (such as falling) utilizing an Intel® RealSense™ camera alongside object recognition algorithms (YOLO, MediaPipe).
- Written in Python and implemented using ROS2 Foxy. I was responsible for implementing patient tracking as well as ROS2 integration and testing.
- Team Capstone Project sponsored by Intel. Awarded the Pioneering Concept Industry Choice Award at Oregon State University's 2023 Engineering Expo

Smallsh
Repository: github.com/schofija/smallsh
- A shell with functionalities similar to Bash. Includes prompt for running commands, '$$' expansion, handling of blank lines and comments (#), supports background processes, I/O redirection (>)
- Utilization of C, systems programming

OpenGL Keyboard Visualization
Repository: github.com/schofija/3d-keyboard
- A 3D visualization of a keyboard that visually responds to real-life keypresses. Shading is included for toggling backlight options. Made in OpenGL
- Utilization of: C++, 3D Graphics (OpenGL), 3D Shaders (GLSL), GLUT, GLEW

FRC Robotics (2018 - 2019)
Website: https://a05annex.org
- Founding member of our high school's first FRC Team. Reached the Houston World Championship our rookie year (2018) as well as the following year.
- Contribution Highlights: Designed and 3D-printed specialty parts using CAD software; developed and maintained the team's website, enhancing online presence; secured funding to support team travel to competition through outreach to local businesses.

Technical Skills

Proficient in:
C/C++, Python, OpenGL, GLSL, Robot Operating System (ROS/ROS2), Linux command line (bash)

Familiar with: Assembly, OpenMP, OpenCL, CUDA, Javascript, Kotlin

Selected Coursework: Simulation and Game Programming, Computer Graphics and Shaders, Open Source Software, Operating Systems, Parallel Programming, Cybersecurity, Digital Forensics, Data Structures, Assembly and Computer Architecture, Android Application Development, Cloud Development, Web Development