

ZACHARY A. PORTER

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Objective

Contribute to a deeply technical project while growing my professional experience.

Schools

Worcester Polytechnic Institute CS Bachelors (Math Minor): 3.97/4.0 Sep. 2019 – Dec. 2022

The Northwest School: 3.96/4.0 Sep. 2015 – Jun. 2019

Washington Aerospace Scholars (University of Washington) Sep. 2017 – May 2018

Work Experience

Microsoft May. 2021 – Sep. 2021

Supported the development of <https://github.com/microsoft/MLOS>. This included adding timeseries support, updating the C# interface, and developing suites to train MLOS for MSSQL hyperparameter optimization.

Progeny Systems Jun. 2020 – Sep. 2020

Wrote code to support crew training protocols and IT administration on vessels in the US Navy. Part of this included migrating from Windows to RHEL Linux. I developed primarily in Java and interfaced with Oracle databases.

Henry Robotics Sep 2018 – Dec 2018

Implemented acoustic echo cancellation and audio filters for telepresence robots at a small Seattle-based startup.

Odyssey Space Research Jun. 2018 – Sep. 2018

Worked with a team of 5 to create simulations for the NASA Gateway space station (https://en.wikipedia.org/wiki/Lunar_Gateway). My personal work included rewriting the inter-simulation comm models, creating a wearable notification system (Android watch hooked up to life support & comm models), and writing a Java CCSDS TM packet and CFDP parser (among other smaller things).

Freelancer.com Dec. 2017 – May 2018

Completed custom programming jobs ranging from simple cipher creation programs to more complex website development and web-server work.

Authored Papers

The Effects of a Performance Enhancing Proxy on TCP Congestion Control over a Satellite Network

Available at: <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9894351>

Project Pages

<https://www.zackporter.com/>

www.github.com/zporter

Technologies

Languages (in order of proficiency): Rust, Java, C, Python, C++, JS/React, Wolfram Language, Lua, C#

Debuggers: GDB, Ghidra, Radare2, Valgrind

Operating Systems: Linux (Arch and Debian derivatives), macOS

Notable Projects

Senior Thesis (in progress)

I am developing a dynamic disassembler that utilizes record and replay technology to efficiently locate segments of assembly that impact program flow (ask me about this).

Zbox (www.zackporter.com/Projects/Digital/ZBox.html)

Created a background service that allows for cross-computer synchronization and backup of folders in real-time. This is my own version of Dropbox that gives control to the tech-savvy user.

Mapping Robot (www.zackporter.com/Projects/Digital/MappingRobot.html)

Built a robot that can map a space using LIDAR and displays a map of the room in real-time on my computer which can then be exported to Sketchup for further analysis.

& more at www.zackporter.com
(references available upon request)