

Stephen Josef Wissow

stephen.wissow@unh.edu

cs.unh.edu/~sjw1000 — github.com/sjwo — linkedin.com/in/sjwo

- Education**
- UNIVERSITY OF NEW HAMPSHIRE Ph.D. in Computer Science, 2020–present
Research interests: algorithms for planning and autonomy. Advisor: Prof. Wheeler Ruml.
Relevant coursework:
 Planning for Robots (Prof. Wheeler Ruml)
 Machine Learning (Prof. Marek Petrik)
 Algorithms (Prof. Laura Dietz)
- UNIVERSITY OF NEW HAMPSHIRE M.S. in Computer Science, 2020
Thesis: *Time Enough: Synchronization for Latency Measurement*. Advisor: Prof. Radim Bartoš.
Relevant coursework:
 Mathematical Optimization (Prof. Marek Petrik)
- REED COLLEGE B.A. in English, 2008
Thesis: *Ethics, Anti-elegy, and Specular Aversio: Language and Image in Li-Young Lee*. Advisor:
Prof. Ellen Stauder.
- Awards**
- ACM SIGUCCS Communication Award of Excellence (joint with Chris Atkins) 2011
Reed College Commendation for Academic Excellence 2003–2004 and 2006–2007
- Projects**
- PLANNING WITH A KNOWN DEADLINE Fall 2021
Class project for *Planning for Robots*: Comparing different heuristics and error models for
use in a deadline-aware version of beam search. (Prof. Wheeler Ruml)
- MOTION PLANNING WITH DYNAMIC OBSTACLES Fall 2020–present
Research project implementing offline anytime BIT* in Rust and integrating into a field-
tested ROS-based autonomy stack for a surface vessel. (Prof. Wheeler Ruml)
- DATA-DRIVEN DYNAMICS MODEL FOR A BOAT Spring 2021
Class project for *Machine Learning*: Used k -nearest neighbors to learn a data-driven model
from physics-based simulated data as proof-of-concept for use in model-predictive control.
(Prof. Marek Petrik)
- Professional Experience**
- UNH CENTER FOR COASTAL AND OCEAN MAPPING, Durham, NH
Graduate Research Assistant September 2020–January 2022
Comparing real-time and offline anytime motion planning for autonomous surface vessels
engaged in ocean mapping.
Deployed to Lake Huron for remote and over-the-horizon autonomous surface vessel oper-
ations. Developed data backup regime and associated chain of custody procedures to serve
multiple scientific and technical stakeholders.
- UNH DEPARTMENT OF COMPUTER SCIENCE, Durham, NH
Graduate Teaching Assistant: Assembly Programming (CS 520) August–December 2019
Presented best practices and answered debugging questions in lab sessions. Guided students
in problem formulation and problem solving during office hours.

Instructor: Android Programming (CS 580) January–May 2019
Presented lectures, developed group activities, graded programming assignments and problem sets, and solicited mid-course feedback from students.

Grader: Object-Oriented Design and Development (CS 619) January–May 2019

Graduate Lab Assistant: Algorithms and Data Structures (CS 515) August–December 2018
Encouraged students' mastery of GDB, Valgrind, and debugging.

DRÄGER, Andover, MA
Software Engineering Intern May–August 2019
Developed Python wrapper for C library to drive EKG simulator for use in automated testing of patient monitor products.

Skills *Programming languages:* Currently working in Rust, Python, C++, and Bash, with previous experience in Java, Scala, R, and x86-64 assembly.
Dev tools: Git, Vim, Tmux, VSCode.

Citizenship U.S.A.