William (Will) H. Solow

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Education

Oregon State University, Corvallis, OR

August 2023 – Present

Doctoral Student, Artificial Intelligence

GPA: 3.91/4.0

Colby College, Waterville, ME

August 2018 - May 2022

Bachelor of Arts, Majored in Computer Science and in Mathematics GPA: 3.96/4.0. Graduated Magna Cum Laude and Phi Beta Kappa

Research Experience

Graduate Research Assistant

August 2023 - Present

Oregon State University, Corvallis, OR

- As a member of the Intelligent and Reliable Autonomous Systems Lab, I work on sequential decision making and forecasting problems with applications to agriculture. Advisor: Dr. Sandhya Saisubramanian.
- Master's Project: I am creating a high fidelity perennial crop simulator that interfaces with state of the art reinforcement learning algorithms. This simulator will be used by members of the AgAid Institute to support the design and evaluation of AI decision tools for agriculture.

Undergraduate Research Assistant

May 2021 – August 2021

Montana State University, Bozeman, MT

Funded by a NSF REU scholarship, I devised and implemented a novel algorithm for the Circular Pattern Matching problem for applications to DNA analysis and malware detection. Advisor: Dr. Brendan Mumey.

Undergraduate Research Assistant

Fall 2020 - December 2022

Colby College, Waterville, ME

- Studied the molecular structure of the water trimer by implementing the Diffusion Monte Carlo algorithm. Advisors: Dr. Lindsey Madison and Dr. Eric Aaron.
- Examined the effects of hyperparameter tuning of dynamical system cognitive agents under the belief-desire-intention framework using reinforcement learning. Advisor: Dr. Eric Aaron.

Publications

- WOFOSTGym: A Crop Simulator for Learning Annual and Perennial Crop Management Strategies. W. Solow, S. Saisubramanian, A. Fern. In Reinforcement Learning Conference (RLC), 2025.
- Calibrating Biophysical Models for Grape Phenology Prediction via Multi-Task Learning W. Solow, S. Saisubramanian. *Under Review*, 2025.
- Budgeted Online Active Learning with Expert Advice and Episodic Priors. K. Goebel, W. Solow, P. Pascantez-Cabrera, M. Keller, A. Fern. *Under Review*, 2025.

Work Experience

Graduate Teaching Assistant

August 2023 - Present

Oregon State University, Corvallis, OR

Create, assign, and grade weekly homework assignments. Hold weekly office hours and proctor midterm and final exams. Courses taught: CS321, Theory of Computation (3 sections over 3 terms).

Assistant Coach, Nordic Skiing

June 2022 - July 2023

Ford Sayre Memorial Nordic Ski Club, Hanover, NH

- Supervised eight weekly training sessions for 20 high school athletes. Planned three, week-long training camps for 20 athletes including facilitating travel, meals and accommodations. Provided weekend race support to athletes qualifying for Junior Nationals. Managed all communication among athletes, parents, and other coaching staff.
- Selected by the New England Nordic Skiing Association (NENSA) to coach at Junior Nationals in Fairbanks, AK.

Mathematics and Computer Science Tutor

August 2019 – May 2022

Colby College, Waterville, ME

Selected by the Mathematics Department to hold weekly office hours and grade weekly homework assignments. Courses tutored (over 6 semesters): MA121, Calculus I (2 sections); MA161 Honors Calculus I; MA162 Honors Calculus II; MA253 Linear Algebra; MA274, Mathematical Reasoning; MA/CS378, Theory of Computation.

Service

Secretary of Finance, AI Graduate Student Association

April 2024 - Present

Oregon State University, Corvallis, OR

Manage club finances and draft yearly budget proposal. Plan yearly club events for 250 active members.

Mentor, Al Graduate Application Support Program

August 2023 – Present

Oregon State University, Corvallis, OR

Mentor students through the graduate application process. Support for 2 prospective students included resume/CV and personal statement review and answering specific questions about Oregon State University's EECS graduate program.

Technical Skills and Coursework

- Programming Languages:
 - Python/NumPy
 - PyTorch/TensorFlow
 - ROS
 - MATLAB, R
 - C/C++

- Relevant Graduate Coursework:
 - Machine Learning
 - Deep Learning
 - Intelligent Systems and Decision Making
 - Online Learning and Recommender Systems
 - Optimization for AI

Professional Skills

- Excellent Communicator:
 - Gave hour-long bimonthly presentations on technical reinforcement learning research papers to a group of 10 graduate and undergraduate students, some of which had minimal background on the topics.
 - Drafted weekly emails with program logistics detailing 8 scheduled training sessions for 20 athletes and their associated parents.
- Strong Organizational Skills
 - Proactively coordinated travel for high school athletes to different training sessions and race venues.
 - Solicited volunteers for weekly reading group presentations for the Intelligent and Autonomous Systems Lab.
- Experienced Leader
 - Captain of the Colby College Division I Nordic Ski Team for two years. Set a standard for a strong work ethic while supporting other teammates.
 - Advocated for accessibility in the classroom, particularly for hearing loss accommodations, as a member of the Disability Awareness Board at Colby College.

Personal

As avid outdoor enthusiast, I enjoy running in the mountains, backcountry skiing, surfing, and mountain biking. I am a certified US Ski and Snowboard L100 Coach and hold certifications in Wilderness First Aid and CPR. At Colby College, I raced for the Nordic Ski team where I was captain for two years, and I ranked in the top 30 finishers at the 2021 Division I NCAA Skiing Championships.