Owen Young otyoung@umich.edu | LinkedIn

EDUCATION

University of Michigan

Bachelor of Computer Science

- GPA: 4.0
- James B. Angell Scholar; William J. Branstrom Award
- Course Highlights: Conversational AI, Intro to Machine Learning, Intro to Autonomous Robotics, Intro to Computer Organization

EXPERIENCE

Air Force Research Laboratory

Advanced Course in Engineering (ACE)

- Developed medium-scale solutions with a 3 person team to 9 graduate-level cybersecurity challenge problems including hardware security, malware analysis and development, and pre and post exploitation attacking
- Planned and executed a weekly tactical operation in both the cyber and simulated physical spheres, culminating in a 58 hour strategic operational campaign competing with fellow interns
- Collaborated with a small research team to explore covert channel development in the Go coding language for the British Ministry Of Defence

University of Michigan ECAS

Discrete Math Discussion Leader

- Taught a supplemental instruction section for a computer science class expanding on each week's lectures
- Prepared original discussion problems related to each lecture's topics and worked students through each solution

Mathnasium

Math Tutor

- Tutored gradeschool students in math over the summer, in order to grow confidence in ability in K-12 students
- Built flexibility adapting to many different learning styles children have, and different methods demanded by different topics

Projects

Convolutional Neural Networks - Introduction to Machine Learning

- Using Pytorch, studied aspects of training and interpreting a CNN with various models
- Compared multiple architectures to tune to a dataset of dogs, additionally compared performance with a modification to the dataset

Kinematics - Introduction to Autonomous Robotics

- Implemented Forward Kinematics on a simulated robot using a matrix stack through joint and link geometries
- Implemented Inverse Kinematics using a Jacobian Transpose and a Jacobian Pseudoinverse

LEADERSHIP EXPERIENCE

Air Force Reserve Officer Training Corps

- Air Force officer candidate training to develop leadership, management, planning, and organizational skills by preparing younger cadets for AFROTC Field Training
- ROTC Association Award, Society of the War of 1812 Award
- Wolverine Airmen Association: Presided over a club to raise funds for and support cadet training

Arnold Air Society

- Organize and service events and accrue additional professional training as an Air Force officer candidate
- Candidate Training Officer: Develop candidates for the organization, developing their skills and a culture of service

Professional Skills

Programming Languages: Java, JavaScript, Python, C/C++, Go Tools: Git, Vim, Flask, PvTorch, Sliver Intermediate Reading, Writing, and Spoken Proficiency in Japanese

Winter 2022

Winter 2022

Jun 2022 – Aug 2022

Jan 2022 – Apr 2022

May 2021 – Aug. 2021

Aug. 2020 – Present

Feb. 2021 – Present

Ann Arbor, MI May 2024