

PETER JOCHEM

Portfolio: <https://peterjochem.github.io/>
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EDUCATION

Northwestern University, Evanston, IL
Masters in Robotics
Department of Mechanical Engineering

September 2019 - Present
GPA: 3.8

University of Wisconsin, Madison, WI
Bachelors of Computer Science

September 2015 - May 2019
GPA: 3.9

OBJECTIVE

I am a passionate software engineer excited about robotics, machine learning and controls engineering. I am currently seeking an internship for the summer of 2020 or an entry level position for the fall of 2020.

PROJECTS

DeepQ Learning

Built a reinforcement learning environment and implemented a DeepQ learning algorithm using Tensorflow and Keras. More details at <https://peterjochem.github.io/>

Terminator

Used the Baxter research robot to pick up a Nerf gun, aim it, and fire it. One arm held the gun while the other arm pulled the trigger. I used ROS to build my application. I utilized AprilTags to locate the Nerf gun and DarkNet ROS to find desired targets. I utilized the MoveIt library to do the motion planning. Worked on a team of four in a distributed git environment. More details at <https://peterjochem.github.io/>

Sawyer Ping Pong

Used C++ and ROS to build a vision system for robotic ping pong. Utilized an Intel Real Sense camera, and PCL. Used MoveIt to actuate the Sawyer arm. More details at <https://peterjochem.github.io/>

TECHNICAL SKILLS

ROS, C++, C, React, Python, Git, Linux, Java, SQL, Tensorflow/Keras, VREP, Gazebo, PCL, OpenCV, HTML, CSS, Javascript, Microsoft Azure, bash, vim, numpy, sympy, machine learning, computer vision

WORK EXPERIENCE

General Atomics, San Diego
Software Engineering Intern

Summer 2018

- Worked in the automation and autonomy department. Utilized Microsoft Azure APIs to build a natural language processor. The program could intake the audio of multiple air traffic control streams and summarize it. The program also included an interactive GUI to cleanly present the summaries to pilots. Presented work to VP of Engineering. The proof of concept project is being further developed and will be incorporated into General Atomics platform.