

# PETER JOCHEM

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

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

*September 2019 - December 2020*  
GPA: 3.8

**University of Wisconsin, Madison, WI**  
Bachelors of Computer Science

*September 2015 - May 2019*  
GPA: 3.9

## PROJECTS

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### ROS Navigation Stack

- Built navigation stack from scratch for differential drive robot
- Ran software on Turtlebot3
- More details at [https://github.com/PeterJochem/Turtlebot\\_Navigation](https://github.com/PeterJochem/Turtlebot_Navigation)

### Go Robot

- Programmed robotic arm to play Go
- Utilized ROS, Gazebo, and MoveIt
- More details at [https://github.com/PeterJochem/Go\\_Bot](https://github.com/PeterJochem/Go_Bot)

## TECHNICAL SKILLS

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

## WORK EXPERIENCE

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**YPC Technologies, Montreal QC**  
*Software Engineer*

2021 - Present

Developed software for robotic kitchen - motion planning and control of UR5 and operations research techniques for efficient scheduling of cooking operations.

**Saga Robotics, Ithaca NY**  
*Software Engineering Intern*

Summer 2020

Wrote software for agricultural robots. Primarily wrote an application to take satellite images of vineyards and compute each row's location. This allows for the robot's path to be created with minimal human labor.

**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.