

Rae Jeong

Mechatronics

Rae Jeong

raychanjeong@gmail.com

raejeong.com

github.com/raejeong

Skills

Robot software using C++/Python

Reinforcement Learning project using Python

Robot Software using ROS

Experience

Istuary Innovation / Robotics Intern

Vancouver, British Columbia, Canada

Motion planning for the UR5 robot arm.

Working with the STOMP planner to do optimization based motion planning.

Fetch Robotics / Robotics Intern

San Jose, California, United States

Designed three degree of actuation mechanism for robotic application.

Electromechanical design and analysis.

Waterloo Autonomous Vehicles Lab / Research Assistant

Waterloo, Ontario, Canada

Gimble implementation and testing for drone research.

Mechanical design of gimbal testing and calibration apparatus.

Writing ROS test scripts for gimbal testing.

MakeLab / Robotics R&D Engineering Intern

Toronto, Ontario, Canada

Research and development of robotic arm design.

Using ROS as framework and microcontroller for modular joint control.

Modular robotic manipulator design with 4DOF, 1kg payload and 1 meter reach.

Projects

Jumping Robot / Controls

Untethered jumping robot using reaction wheels.

State space control design using MATLAB Simulations.

Crawler/ Reinforcement Learning

Simple approximate Q learning to solve locomotion/pacman.

Implementing Q learning software.

Education

University of Waterloo / Third Year Mechatronics Engineering B.A.Sc

September 2013 - April 2018, Waterloo, Ontario, Canada