Yoonyoung Cho

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EDUCATION

OLIN COLLEGE OF ENGINEERING **Needham, MA**
E:Robo Candidate, Expected graduation, May 2019
- Recipient of 4 year 50% Olin Merit Scholarship

UDACITY ROBOTICS SOFTWARE NANODEGREE **Mountain View, CA**
Industrial curriculum in Robotics fundamentals and algorithms
- Cutting-edge curriculum in modern robotics; controls/localization/navigation/perception/deep learning

WORK EXPERIENCE

Powered Mobility Project | *https://github.com/olinrobotics/Powered-Mobility* **Needham, MA**
Project Lead *Summer 2018*
- Research on ROS-based shared autonomy suite development with powered wheelchairs
- Integration of autonomous perception, localization and navigation suites on commercial mobile platforms

Piaggio Fast Forward | *https://www.piaggiofastforward.com/* **Boston, MA**
Robotics Software Intern *May 2017 – Dec 2017*
- Deep learning based development/deployment of object detection and tracking system in tensorflow
- High speed visual object detection and robust object tracking at 60+ FPS

Olin College | *https://github.com/Olin-FunRobo* **Needham, MA**
Teaching Assistant *Sep 2016 – Dec 2016*
- Rebuilding the software curriculum of the ENGR 3390: Fundamentals of Robotics with ROS

Olin Robotics Lab | *https://github.com/BluetoothFishTagging* **Needham, MA**
Researcher *Summer 2016*
- Crowdsourcing RFID-Enabled Fish tracking technology, in partnership with the Large Pelagics Lab
- Paper submission accepted to IEEE Oceans'16 conference | https://ieeexplore.ieee.org/document/7761023
- Scalable mobile and web app development with sensor interfaces; Android | Node.js | MySQL | AWS

PROJECTS

Alphabot: Robotic Systems Integration | *https://github.com/RoboSys-Alphabot*
School Project *Jan 2017 – May 2017*
- ROS-operated autonomous rover for generalized search-delivery mission
- Wireless ROS Interface for internal sensors on Android devices
- High fidelity SITL Gazebo simulation development

Olin Interactive Robotics Lab | *https://github.com/yycho0108/st_r17_ros_driver*
Research Project *Sep 2016 – Present*
- ST-R17 Robotic Arm C++ Driver compatible with general ROS hardware interface
- Stereo Vision based dynamic pick-and-place feedback control
- Visual fiducial-based robot arm parameter calibration

International Aerial Robotics Competition | *https://github.com/Olin-Aero/iarc-2017*
Club Project *Sep 2017 – May 2018*
- Project lead on *perception*, *localization* and *simulation* stacks
- Model-based multi-target UKF state estimation
- High fidelity Gazebo simulation of IARC Mission 7

SKILLS

- Robotics | Machine-Learning | Computer Vision
- Framework: Tensorflow | ROS | Android | Gazebo | Qt | CUDA | WebGL
- Language: C | C++ | Python | Javascript | Java
- Fabrication: Mill | Lathe | CNC Shopbot | 3D Printing | Laser Cutter | MIG Welder