

Kyuwon (Andy) Choi

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EDUCATION

Cornell University – School of Engineering, (Ithaca, NY)

Expected Graduation: May 2020

B.S. Candidate in Mechanical Engineering

GPA: 3.43, Major GPA: 3.51 Dean's List (Spring 2017, Fall 2018, Spring 2019)

Relevant Courses: System Dynamics, Mechatronics, Python, Foundation of Robotics, Java, Differential Equations, Linear Algebra

EXPERIENCE

Teaching Assistance for MAE 3780: Mechatronics (Ithaca, NY)

August 2019 - Present

- Teaching a lab section for MAE 3780 Mechatronics
- Leading office hours and handling the preparation and grading of homework and exams

Autonomous Systems Lab / Verifiable Robotics Research Group (Ithaca, NY)

Sep 2018 – Present

Undergraduate Research Assistant under Professor Hadas Kress-Gazit and Professor Mark Campbell

- “Creating skills for KUKA youBot using Robot Operating System (ROS)”
 - The skills range from simple to complex, such as picking, placing, driving, and other manipulation tasks
- Participating in “Duckietown AI Driving Olympics”
 - Program the Duckiebot to recognize AprilTags located at each intersection
 - Odometry for the Duckiebot: Take in how far the Duckiebot thinks it has moved (based on the wheel encoders or the published velocity) and give a new position
- 3D Simultaneous Localization and Mapping
 - 3D map the lab space with ZED Stereo Camera, LiDAR, and JACKAL.
 - Used RTAB-MAP for integrating the odometry, depth and RGB data from three different sensors, and displayed the map on RVIZ

Roar Lab at Columbia University (New York, NY)

May 2018 – Jun 2018

Research Intern

- Performed a literature review of various neck braces under Professor Sunil Agrawal

LG Electronics (Englewood Cliffs, NJ)

Jun 2017 – August 2017

Energy Management Systems LED Sales Engineering Intern

- Provided remote and on-site support to customers/partners with technical questions regarding hardware, software and controls
- Tracked and followed all commissioning services paid to LG while maintaining online database files
- Supported Commissioning Services (e.g. Invoices, Vendor Registration, contact info, service model questions)
- Supported the R&D team's certification efforts with wireless controls partners

H Architect (New York, NY)

Dec 2016 – Jan 2017

Research Intern

- Researched the designs and the floor plans of all the constructions of high-rise buildings, museums, and performing arts centers throughout the country (NYC, Chicago, San Francisco, etc.)

ACTIVITIES / SKILLS

Cornell University ACHA D1 Ice Hockey Team

Sep 2016 – Mar 2018

Vice President of the Practice Squad, Game Squad Player

Cornell University American Society of Mechanical Engineers

Sep 2017 – Present

- Participate in professional and social networking events hosted by ASME

Cornell University App Development

Sep 2016 – Dec 2016

- Part of the 10-week new member development project

Cornell Audio Engineering Society

Sep 2016 – May 2018

- Member of two project teams: speaker construction and music production

Computer

- Proficient in Microsoft Office; Experience in Python, MATLAB, and Java; Robot Operating System (ROS)