Maxwell Thomas Asselmeier

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Education

University of Illinois at Urbana-Champaign May 2021
Bachelor of Science, Mechanical Engineering GPA: 3.97/4.00
Minor, Computer Science
Chancellor's Scholar – 125 invited out of 7,500 incoming students
Grainger Engineering Scholarship – awarded to top 10% of class

Work Experience

Carnegie Mellon University Robotics Institute Summer Scholars Program Pittsburgh, PA
Undergraduate Researcher May 2020 – Aug 2020

- Adapted a Deep-Q neural network to select modules to append to a robotic arm design given a position in space for the arm to reach
- Implemented an actor-critic reinforcement learning algorithm to optimize continuous design variables for modules being added to a robotic arm design.

Oregon State University Robots in the Real World Program Corvallis, OR
Undergraduate Researcher Jun 2019 – Nov 2019

- Prototyped pneumatic artificial muscles to investigate the implementation of antagonistic actuator systems into soft robotic arms
- Authored an accepted conference paper to detail the primary advances that were made through the work on this project

Projects

Automated Vegetable Slicer Course Project Champaign, IL
Team Member Aug 2019 – Dec 2019

- Researched various mechanisms to achieve the motion required to cut a vegetable
- Built a device that constrained, moved, and sliced a vegetable using one 12 V DC motor

Activities

Engineering Ambassadors Champaign, IL
President Aug 2019 - May 2020

- Run weekly class meetings and meet with executive board members and advisors to align the organization and establish objectives and events for the semester
- Conduct STEM-focused presentations and hands-on activities to classes of 10 to 50 students to foster interest in future engineering careers

Grainger Engineering First-Year Experience Champaign, IL
Engineering Learning Assistant Aug 2018 - Present

- Instruct a sixteen-week engineering orientation class to freshmen students to guide in acclimation and success in college as well as engineering
- Participate in an eight-week training course to prepare for facilitating classes

Skills

Software: Creo, Fusion 360, MATLAB, ROS, Solidworks, Optitrack, Unity
Languages: C++, C#, Java, Python, R

Courses

Data Structures	Artificial Intelligence	Deep Learning
Probability and Statistics	Applied Linear Algebra	Introduction to Robotics