



UBC OPEN ROBOTICS

Robocup@Home Arm/Torso - Mechanical Designer

Position Description:

As mentioned on our website, the Robocup@Home project involves cutting-edge R&D in the realm of service robotics. The team is progressing towards competing in the internationally-acclaimed Robocup Competition, @Home League. The Arm and Torso team is responsible for determining specifications, designing, and building an autonomous robotic manipulator for our Robocup@Home robot. We are currently in between the design and manufacturing stages with parts on the way. We would be involved in machining and assembling the robot over the next few months.

Number of Positions Available: 1

Responsibilities:

- Using Computer-Aided Design (CAD) software to design/modify the robotic manipulator
- Machining parts and assembling the Arm and Torso
- Develop and document testing methods for the assembled Arm/Torso
- Work with the Electrical sub-team to integrate the mechanical and electrical parts

Preferred Qualifications:

- Minimum second year standing with experience in one or more of the following qualifications (third year MECH preferred but not required)
- Proficient in CAD prototyping with software such as Solidworks and Onshape, with emphasis on Finite Element Analysis (FEA)
- Experience in Design for Manufacture and Assembly (DFMA)
- Machine shop experience is a bonus