Daniel Fu

Peer Review: Amanda Hoeksema

I attended Amanda Hoeksema’s presentation on prototyping of a high-mobility inspection robot. Amanda’s poster is thorough and clear, effectively describing the steps taken in this project. The use of images and diagrams to convey key information about the robot, its use case, and its electronics is particularly good. The image of the prototype in action gives viewers an at-a-glance idea of the kind of tests being conducted, and the electrical circuit diagram supports a description of the prototype’s electronics that might otherwise be opaque. Important information about the prototype, such as its scale and materials, is naturally included in the description of the design process. The poster is also neatly constructed, using space effectively without feeling cramped.

Amanda’s presentation was well rehearsed and delivered. She was very prepared to answer questions and share additional details about her research. Bringing the actual prototype to the presentation was a very effective visual aid. Along with the set of scaled-down stairs, it allowed a physical demonstration of the robot’s climbing action, and it made her presentation more interesting.

Mecanum and omni wheels are brought up in the poster, but not defined. As these are terms specific to robotics (I didn’t know them), the poster could potentially be improved by labelling them in one of the diagrams so viewers know what these terms are referring to. Additionally, an important finding (that omni wheels climb stairs better than mecanum ones) was included in the narration; perhaps it should also be mentioned in the poster. On the other hand, Amanda’s discussion of this finding and its implications during the narration was detailed.