

Make-up Assignment

Research one of the following current robotic platforms and answer the questions below.

*Your submitted assignment must be typed, single spaced, and a minimum of 2 pages. Figures and tables are permitted, where applicable.

- **DARPA BigDog Robot**
 - **DARPA Crusher Robot**
 - **HiBot Amphibious Snake Robot**
 - **NASA/JPL Spirit/Opportunity Rover**
 - **NASA/JPL Curiosity Rover**
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- What is this robot's purpose?
 - What sensors does this robot use?
 - What perception methods / algorithms does it have to model the world it is sensing? (i.e. *“this robot has a camera and uses facial recognition software to perceive faces in the world around it ...”*)
 - What makes this robot mobile (does it have legs, wheels, or other means of motion)?
 - How is this robot powered? What power constraints does this robot have? Can it run for a couple of minutes? For a couple of hours? For a couple of days?
 - By the definition outlined in class, is this robot a “true” robot? (i.e. is it autonomous?). If so, describe how it achieves the three qualities of a robot discussed in class.