

CENG 6533 Robotics

Homework 2 Spring 2015

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Please read the material on these WEB sites:

You can find the Adept Specs (Adept New Applications Review Worksheet) on my WEB site.

http://en.wikipedia.org/wiki/Industrial_robot Read article

<http://www.robots.com/> Six Axis Robots and video
<http://www.robots.com/faq/show/what-are-six-axis-robots>

Research:

90 Points (30 each)

Search the WEB or other sources and bring the Table of Robot Specifications up to date with at least 3 robots available for purchase for industrial or commercial applications. Give the specifications of the robot in the table. Some companies require a request for the cost of the robot.

(If you cannot find all of the characteristics just write “NF” = Not Found)

10 Points

NOTE: List all references - the web URL, books, etc. Also, please list the DATE of the reference and a brief summary of the reference.

In Textbook by Klafter:

Klafter Page 695-696

Klafter Table 1.8.11 and Appendix A which lists Commercial Robots.

Robot Specifications - Be consistent in units across a category.

Name and Model	Eshed ER-7	Model 2	Model 3	Model 4
Type	Base & Arm			
Price if possible	About \$15,000			
Weigh of robot	66lbs (30 kg)			
Load in pounds or kg	4.4 lbs (2 kg)			
Max. tip speed (in/sec)	39.4 in/sec (1000 mm/sec)			
Coordinate System	Spherical			
DOF	6 with gripper			
Number of Axes	5			
Reach length	About 30 in. (76.2 cm)			
Repeatability	0.08in. (.02mm)			
Applications	Research, Education, Light assembly			
Other Characteristics	Sophisticated Programming language			