

Robotics in Construction Automation

Assignment 9

Due : May 8 2008 2:20pm

Assigned Reading

Bernold, L. E. (2007). "Control Schemes for Tele-Robotic Pipe Installation," *Journal of Automation in Construction*, 16, pp.518-524.

Description

Please read the assigned reading and answer the following questions. The answers need to be clear and straight to the point. Each answer can be a short paragraph but should be limited within 300 words and one page (including figures). If you refer any material other than this assigned reading, please cite the reference as a footnote. Please submit the assignment before the due date before the class and please list your name and school number in the right-upper corner of the first page.

Questions

1. Please explain the risks in pipe installation.
2. Please describe mechanism of the pipe manipulator (PipeMan) developed in the research.
3. Based on the paper, please compare the working productivity between the traditional installation method (using manpower) and the tele-operation method (using PipeMan).