Manish Mehta

Group 5

CIS II: Paper Critical Review

The Benefit of Force Feedback in Surgery: Examination of Blunt Dissection. Christopher R. Wagner, Nicholas Stylopoulos, Patrick G. Jackson, and Robert D. Howe. Presence: Teleoperators and Virtual Environments 2007 16:3, 252-262

Project Background

I am part of group 5, and our project is creating the haptic interface for the surgical manipulator. Total hip replacement surgery is an extremely popular surgery in the United States. It is not without issues, however. Over time, the implants begin to degrade the surrounding bone and cause resorption in a process known as osteolysis. To prevent the integrity of the entire bone from being compromised, revision surgery is performed in which the surgeon inserts a tools through a screw hole made for the hip replacement. The manipulator is intended to be used to make hip revision surgery more efficacious.