

Designing Force Feedback Robotic System With Applications in Surgery

Status: Filled

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Project Description

Telerobotics is an emerging robotic technology where two robots are linked to imitate each other's motion. In telerobotic surgery, one of the robots (master) is manipulated by a surgeon and the other (slave) does the surgery. In this process it is important that the surgeon can sense the forces of the slave robot through the master. Haptic Systems are implemented for the end user to regain a sense of touch in telerobotics. This can be achieved by creating opposing forces and motions. This capstone project is the continuation of a project that has been started by one of the capstone groups last year. So far a robotic system has been developed with limited capability of demonstrating force feedback. The goal of this year capstone project is to take this prototype to the next stage by incorporating more capabilities into it and finally demonstrating the telerobotic system in action.