

# Between People Haptic/Kinesthetic Feedback System

## PROJECT DESCRIPTION

In this project, we plan to implement a novel tele-operation training system which allows us to record kinesthetic information from expert performer and 'play back' to novice learners. The system will use two master Phantoms (haptic device) to capture hand movements from the experts and deliver to two slave Phantoms in hands of novices. We will test whether skills can be learned effectively with the enforcement of kinesthetic feedback from experts. We also plan to investigate whether the skills learned will be retained stably while performing in a stressful environment.

## FACULTY-DEPARTMENT

Medicine and Dentistry- Surgery

## DESIRED FIELD OF (STUDENT) STUDY

"Computing Science student with experience of using these programs: C++, Java, HTML, MATLAB.

Students with experience in using the Phantom (haptic interface) device, involving with designing tele-operation system will be preferred. "

## INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

## NUMBER OF INTERNSHIP POSITIONS

1

## INTERNSHIP START DATE

July 4

## INTERNSHIP END DATE

October 4

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)  
University of Alberta International  
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## ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.