

Research Topic- Haptics for robot-mediated surgery

Prior research in our group has identified the need to offer tactile feedback when interacting with a robot such as Da Vinci, to perform surgery. This PhD is focused on designing an electromechanical device that can enable tactile feedback in a surgical scenario. It benefits from supervisory feedback from surgical and clinical knowledge of Mr Nikhil Vasdev, with expertise in Da Vinci operation.

Requirements: Applicants should have a very strong first degree or (preferably) a Master's degree in Cybernetics, Biomechanics, Computer Science or other relevant area, Candidates are expected to have very good programming skills and strong mechanical design background. Good knowledge of haptic systems is also required.

Informal contact before application: the PhDs will be conducted under Prof Farshid Amirabdollahian's supervision and candidates are invited to contact f.amirabdollahian2@herts.ac.uk. Dr Mahmoud Chizari and Mr Nikhil Vasdev will be on the supervisory role of this work.