





Imperial College London



RAVEN II Surgical Robot

The RAVEN is a proven, third generation surgical robotics testbed that provides the nucleus of an open innovation <u>community</u>. This community is united in the application and support of a common platform, and each member has the power to pursue and develop their own intellectual property. Improvements made by the community to the core robotic manipulator will be made available to the entire group. Individual members then have the opportunity to pursue their own proprietary advances in procedures, attached instruments, supervisory software, and human/machine interfaces.



Key Features

- Equipped with 2 Geomagic Touch haptic devices
- Large Community
- Compatible with Intuitive Surgical da Vinci instruments
- Open Source Platform
- 2 Robotic Arms with laparoscopic instruments

Possible Applications

- Haptics
- Control
- Autonomous Surgery
- Surgical Tool Development
- Human-Robot Interaction
- Machine learning/ AI
- Computer vision
- Multi-Robot Integration
- Surgical procedure simulation



Access information

Corresponding infrastructure Imperial College London The Hamlyn Centre

Bessemer Building, Kensington,

Location London SW7, UK

Unit of access Working day

Technical specifications

DoF Two 6 DOF (+ grasp) robotic arms

Mechanical information Tendon driven

OS Compatible with Linux and Windows, Runs on ROS

Additional information

http://rll.berkeley.edu/raven/ http://applieddexterity.com/