**Medical / Surgical Robot**

**Journal**

1. International Journal of Computer Assisted Radiology and Surgery  
   Impact Factor: 1.659 (2013)  
   <http://www.iscas.net/>
2. International Journal of Medical Robotics and Computer Assisted Surgery  
   Impact Factor: 1.532  
   <http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1478-596X>
3. Computer Methods in Biomechanics and Biomedical Engineering  
   Impact Factor: 1.793  
   <http://www.tandfonline.com/toc/gcmb20/current#.VQJieJqiIjy>
4. Biomedical Engineering Online  
   Impact Factor: 1.75  
   <http://www.biomedical-engineering-online.com/>
5. Journal of Biomechanics  
   Impact Factor: 2.496 (2013)  
   <http://www.jbiomech.com/>
6. IEEE Transactions on Biomedical Engineering  
   Impact Factor: 2.233  
   <http://tbme.embs.org/>
7. Radiology  
   Impact Factor: 6.214 (2013)  
   <http://pubs.rsna.org/journal/radiology>

**Conference**

1. Computer Assisted Radiology and Surgery (CARS)  
   - **예상 제출 기한: 2016년 1월 10일경** (**2016년 6월 23일경 개최)**  
   - 관련 주제: surgical navigation and robotics  
   <http://www.cars-int.org/>
2. International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)  
   - **예상 제출 기한:** **2016년 3월 1일경** (**2016년 10월 1일경 개최)**   
   - 관련 주제: Interventional robotics / Tracking and navigation / Interventional imaging  
   <http://www.ipcai.org/>
3. The Hamlyn Symposium

- **예상 제출 기한: 2016년 3월 10일경** (**2016년 6월 20일경 개최)**  
- 관련 주제: Mechatronic designs for medical robotics / Medical image computing and computer assisted intervention / Medical robotics for NOTES  
<http://www.hamlyn-robotics.org/>

1. International Conference on the IEEE Engineering in Medicine and Biology Society  
   - **예상 제출 기한:** **2016년 3월 15일경** (**2016년 8월 25일경 개최)**  
   - 관련 주제: Biomechanics and Robotics  
   <http://embc.embs.org/2015/>
2. Medicine Meets Virtual Reality (MMVR)  
   - **예상 제출 기한:** **2015년 7월 25일경** (**2016년 2월 20일경 개최)**  
   - 관련 주제: Surgical Simulator / Augmented Reality for Human Machine Interface  
   <http://www.nextmed.com/en/left/welcome/>
3. International Conference on Information Processing in Computer-Assisted Interventions (IPCAI)  
   - **예상 제출 기한:** **2015년 11월 15일경** (**2016년 6월 20일경 개최)**  
   - 관련 주제: Interventional robotics / Tracking and navigation / Interventional imaging  
   <http://www.ipcai.org/>
4. IEEE International Conference on Technologies for Practical robot Applications (TePRA)  
   - **예상 제출 기한:** **2015년 11월 15일경** (**2016년 4월 20일경 개최)**  
   - 관련 주제: Robot Applications (Medical & Rehabilitation)  
   <http://www.ieeerobot-tepra.org/cfp.htm>
5. Asian Conference on Computer Aided Surgery (ACCAS)  
   - **예상 제출 기한:** **2016년 1월 말경** (**2016년 6월 말~7월 초 개최)**  
   - 관련 주제: Surgical Robotics and Instrumentation / Surgical Simulation and Education   
   <http://serve.me.nus.edu.sg/accas2015/>
6. 대한의료로봇학회  
   - **예상 제출 기한:** **2015년 5월 말경?** (**2015년 7월 10일경 개최)**
7. The Hamlyn Symposium

Deadline for submitting paper: Mar 30, 2016

<http://www.hamlyn-robotics.org/>

1. International Conference on the IEEE Engineering in Medicine and Biology Society (EMBC)  
   Deadline for submitting paper: Apr 14, 2016

<http://embc.embs.org/2015/>

1. 6th IEEE RAS and EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob)

Deadline for submitting paper: Mar 01, 2016

http://www.ieeebiorob2016.org/

1. International Conference on Cybernetics, Robotics and Control

Deadline for submitting paper: Apr 15, 2016

http://www.iccrc.org/index.html

1. International Conference on Robotics and Control Systems (RCS)

Deadline for submitting paper: Apr 01, 2016

http://www.iasted.org/conferences/cfp-842.html

1. International Conference on Advanced Intelligent Systems and Informatics (AISI)

Deadline for submitting paper: Apr 30, 2016

http://egyptscience.net/AISI2016/home.html

1. S
2. Dates Passed

Computer Assisted Radiology and Surgery (CARS)  
International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)

IEEE RO-MAN  
International Conference on Information Processing in Computer-Assisted Interventions (IPCAI)

IEEE International Conference on Technologies for Practical robot Applications (TePRA)

Asian Conference on Computer Aided Surgery (ACCAS)

PETRAE

**Objective: To evaluate the effectiveness of angioplasty surgery by introducing virtual fixtures.**

**Purpose:** This experiment will be helpful to realize the effectiveness of angioplasty surgery by providing haptic feedback through virtual fixtures.

**Experimental Setup:** Experimental setup includes one PC, two monitors and Master/Slave DSP teleoperation setup:

* Subject: 10 subjects of different age, gender and may or may not have experience with haptic devices
* Each subject has to do the two phases of experiment
  + With haptic feedback
  + Without haptic feedback
* One Monitor on right side of operator will be used to show the augmented image
* One monitor on the left side of operator will be used for showing numerical data (master and slave position information – Translation: mm, Rotation: degrees) and getting the reference images
* Operator is allowed to use only the master haptic device
* Images from heart model are taken by webcam
* Heart motion is being performed by using Falcon haptic device
* Each subject has to perform 5 sessions separated by a rest period of 1 day
* Each session contains 6 trails and time difference between trails will be 5 minutes

**Experimental Procedure:**

* Before the experiment
  + Subjects will be demonstrated about the whole system
  + They will be allowed to take time to understand the x-ray images
  + They will be allowed to get familiar with the haptic device
* Experiment will start when subject will start marking the virtual fixture points
* Experiment will end when subject will move the guidewire in desired location

**Evaluation Criteria:**

* Task completion time = Ending time – starting time
* Task learning rate
  + After six sessions data can be analyzed to see the decrease in task completion time
* Peak force that subject will apply while trying to cross the virtual fixture
* Penetration depth in forbidden region
  + Subjective feedback o Subject will mark the surgical procedure out of 10 (0: very hard, 10: very interactive)