



AE-CAI | CARE | OR 2.0 Joint Workshop on Augmented Environments for Computer-Assisted Interventions @ MICCAI 2020

CALL FOR PAPERS

<https://workshops.ap-lab.ca/aecai2020/>

Welcome to the 14th Augmented Environments for Computer-Assisted interventions (AE-CAI), 7th Computer-Assisted Robotic Endoscopy (CARE) and 3rd OR 2.0 joint workshop hosted online in conjunction with MICCAI 2020 on Sun, Oct. 4th, 2020!

PAPER SUBMISSION: *Submit your contribution to the joint AE-CAI / CARE | OR 2.0 workshop by July 7th, 2020!*

We invite papers formatted according to the [Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization](#) style files. Please visit [The Author Guide](#), for both [Microsoft Word](#) and [LaTeX](#) templates. We recommend **12 page paper for initial submission for peer review** and up to 15 page **final submission** post revision for final publication. The joint AE-CAI | CARE | OR2.0 joint workshop adheres to the **double-blind peer review process** - please follow the [MICCAI anonymity guidelines](#) when preparing your submission. Papers will be reviewed and assessed based on quality, scientific merit, and best means of presentation. We encourage submission of papers that demonstrate clinical relevance, clinical applications and validation studies.

Submit your contribution here: <https://cmt3.research.microsoft.com/AECAI2020/>

TOPICS TO BE ADDRESSED IN AE-CAI | CARE | OR2.0 INCLUDE, BUT ARE NOT LIMITED TO:

Medical Augmented and Virtual Reality
Surgical Simulation and Training
Multimodal Data Visualization and Image Fusion
Image-guided Surgical Navigation and Robotics
Display Technology for Medical Imaging and Visualization
Image Guided Intervention System and Platforms
Human-Computer Interaction and Information Display
Medical Image Formation, Analysis, and Interpretation
Computer Assisted Intervention, Interventional Imaging
Image-guided Robotics, Image-guided Intervention
Surgical Planning and Simulation
Systematic Extra- and Intra-corporeal Imaging Modalities
General Biological and Neuroscience Image Computing
Patient-Specific Modeling and Medical Image Understanding

Robotic and navigated endoscopy
Stereoscopic endoscopy
Ultrasound endoscopy
Endoscope tracking, navigation, planning and simulation
Endoscopic video computing and computer vision for endoscopic applications
Endoscopy skill training and evaluation
Context-Aware Operating Theatres
Surgical vision and perception
Cognitive models
Sensors, Wearable and implantable electronics and robots
Decision support networks to enhance surgical procedural assistance
Context-awareness and team communication in the operating theater
Human-robot collaborative systems
Surgical training and assessment

IMPORTANT DATES (SUBJECT TO CHANGE):

July 7th, 2020

July 31th, 2020

Aug 10th, 2020

Aug 20th, 2020

Oct 4th, 2020

Paper Submission Deadline

Notification of Acceptance

Response to Reviewers and Revised Manuscripts Due

Camera-ready Papers Due & Presenting Author Registration Deadline

Joint AE-CAI / CARE / OR 2.0 Workshop (online)

PROCEEDINGS

Workshop proceedings will be published in a **Special Issue on AE-CAI | CARE | OR 2.0** of the [Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization](#) journal.



Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization

Publish open access in this journal

AWARDS

Top papers will be recognized with a paper award sponsored by Northern Digital Inc. (NDI) and Intuitive Surgical.

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