

Video Based Assessment Group

A postdoctoral training position is available in the Artificial Intelligence and Medical Simulation (AIMS) laboratory of [Dr. Ganesh Sankaranarayanan](#) in the Department of Surgery at UT Southwestern Medical Center to study and assess surgical proficiency and prediction of surgical outcomes using recorded surgical videos. Our laboratory, as part of the Center for Assessment of Surgical Proficiency, has several exciting projects related to automated surgical performance assessment, feedback, coaching and outcomes assessment.

Roles and Responsibilities:

- Conduct research, develop and apply advanced machine learning, deep learning and computer vision methods for multiple applications in surgical video analysis
- Collect and analyze data, and document the results in technical reports and peer-reviewed publications
- Contribute to grant proposals and collaborate with others in a multi-disciplinary team environment
- Pursue independent research interest and work with scientist internal and external to the lab

Qualifications:

- A Ph.D. and/or M.D. degree in electrical engineering, computer science, or related field with 4+ years of relevant work or research experience.
- Excellent knowledge of computer vision and computer graphics.
- Advanced knowledge of machine learning and deep learning algorithms.
- Hands-on experience in one or more deep learning frameworks such as Pytorch, Tensorflow, Keras, etc.
- Great presentation and interpersonal skills.
- A track record of research excellence demonstrated in publications at leading conferences and journals such as CVPR, ICCV/ECCV, SIGGRAPH, NeurIPS etc. is a plus.

Information on our postdoctoral training program and benefits can be found in our [Postdoc Handbook](#) or at <http://www.utsouthwestern.edu/postdocs>.

Interested individuals should send a CV, statement of interests, and a list of three references to:

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