



Biomedical Informatics Grand Rounds
Wednesday, October 26th, 2022 3:00 pm – 4:00 pm

Reverse Engineering the Doctor's Mind

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Remote Access

Join Zoom Meeting <https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09>

Meeting ID: 956 1719 7636 Passcode: 924293

Bio: Anirban Mukhopadhyay leads an independent research group at TU Darmstadt, Germany that develops assistive AI for Image-guided diagnosis and surgery. He organizes premier international conferences, challenges and workshops. Dr. Mukhopadhyay is the AI-partner of RACOON, the radiology conglomerate of 38 German University hospitals to combat COVID-19. He hosts the popular podcast “AI-Ready Healthcare.”

Abstract: To scale-up access to healthcare, we are reverse engineering the doctor's mind into an AI agent. Our goal is to attain robust medical intelligence for a dynamic clinical setting, by taking a 3 step approach: start like a medical intern, learn like a resident physician and practice like a doctor. I will introduce some of our research highlights from both image-based diagnosis as well as image-guided surgery. This includes shape-aware segmentation, automatic quality assessment of medical AI under distribution shift as well as our publicly-available software packages. By listening to this talk, you'll get a perspective of where the medical AI research of our group at TU Darmstadt is heading in the next 5 years.

Educational Objects: Upon completion, participants should be able to:

- Understanding of shape-constrained segmentation
- Robustness of medical AI under distribution shift
- Continual learning for the dynamic clinical world

Disclosure Statement: The faculty and planners have no relevant financial relationship with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing health care products used by or on patients.

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