

Joint Biomedical Engineering Seminar Series

MU ▪ MCW ▪ UWM

Seminar Announcement

Friday, October 13th, 2017

Noon – 1:00 pm

Olin Engineering, Room 202

Marquette University

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Abstract

IDENTIFYING THE THIRD DIMENSION HIDDEN IN 2D FLUOROSCOPY – A STORY OF APN HEALTH, LLC

In 2009, a small group of engineers and mathematicians, based in the Milwaukee area, led by Dr. Jasbir Sra, MD, started working on what appeared to be an impossible problem: accurately determine the 3D position of a cardiac ablation catheter using only standard fluoroscopy – a 2D technology, in a beating heart. A further constraint was that this was to be done in real time during clinical procedures. Moreover, once accomplished, create 3D cardiac activation maps to inform radio frequency ablation procedures.

This talk presents the origin of the ideas and their development and testing, through patents and FDA clearance of the basic technology by APN health, LLC (<http://www.apnhealth.com/>) Besides the interesting scientific story, it is a story of collaboration between engineers, mathematicians, statisticians, and computer scientists in a project that now spans 8 years and employs over 40 scientists and engineers from throughout the United States and India.

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Olin Engineering Center is located at 1515 W. Wisconsin Ave, Milwaukee, WI. Parking is available in Structure 1 on 16th Street between Wisconsin & Wells Aves. Refreshments will be served.