Seeking Entrepreneurial Technical Lead for Instrument Tracking Project
Computer Vision / Deep Learning Skills Required

Company Description
Sonavex is a Baltimore based venture-backed medical device company spun-out of Johns Hopkins in 2013. The company’s primary focus is simplifying point-of-care ultrasound imaging to increase its utility for new perioperative applications. Sonavex’s first system, EchoSure, detects post-operative blood clots to prevent catastrophic surgical failures. The company has raised a Series A financing, received two FDA clearances, has been awarded numerous federal grants, and has begun commercializing its first products in 2019.

Project Opportunity
Sonavex and its scientific and surgical collaborators have identified an exciting opportunity to improve patient care while increasing hospital operational efficiency by tracking instrument use in the OR with an imaging-based solution. Hospitals currently have little insight into which instruments are being used in each procedure. This leads to two key issues. Far too often, the requisite instruments are not in the OR when a case begins, which results in expensive and frustrating surgical delays while teams search the hospital for the correct instrument(s). Even in procedures where all necessary instruments are present, there are always excess unused instruments opened as part of a tray, leading to excessive resterilization costs. Literature suggests that with proper tracking, the number of instruments per case can be reduced by 40%-80%, which results in millions of dollars in savings for a busy hospital.

Position Description
Sonavex is seeking an entrepreneurial self-starter to lead the technical development of an imaging-based solution to this problem. The successful candidate will work under the guidance of Dr. Jerry Prince, Dr. Ryan Collar, Dr. Kofi Boahene, and the Sonavex Management and Engineering teams. Should early development of this solution prove successful, the company is committed to commercializing the technology with the technical lead.

Qualifications
- Candidate must be currently enrolled in an Electrical Engineering, Computer Science, Biomedical Engineering, or other related program at the graduate level or as an undergraduate upperclassman
- Background in computer vision and/or deep learning
- Programming experience
- Strong understanding of data structures, algorithms, and appropriate documentation
- Prove ability to define design requirements and related testing
- Deadline and detail oriented
- Self-starter, able to excel in an independent setting
- Exposure to surgical environments is a strong plus
- Legally authorized to work in the United States without restriction.

Application Process
All interested applicants should send their resume to:
Michelle Zwernemann
Vice President of Operations, Quality & Strategy
Sonavex, Inc.
mzwernemann@sonavex.com
443-862-3223