BRITESEED

Optical Engineering Internship

LISTING

Company Name
Briteseed, LLC

Company Address
4660 N. Ravenswood Ave.
Chicago, IL 60640

Company Point of Contact
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CTO
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Briteseed is a forward-thinking company committed to making minimally invasive surgery safer and more efficient. Our team is developing the next generation of laparoscopic and robotic surgical tools that provide real-time detection and visualization of hidden blood vessels, ureters, and other structures using advanced optics and artificial intelligence.

Briteseed is supported by the NIH, NSF, the Texas Medical Center, and was named one of the top medical startup companies by MedTech Innovator.

Job Description

The Briteseed Engineering Team is seeking an Optical Engineering Intern to join our effort to advance the development of real-time optical detection systems. We are designing the first integrated tissue detection system into surgical tools and are seeking a passionate, self-motivated engineer with optics interest and expertise to support the development and testing of next-generation laparoscopic medical devices.

Education

- Pursuing degree in Optics, Image Science, Applied Physics or related field

Preferred Skills & Expertise

- Strong understanding of optical and imaging systems, algorithm and software development
- Experience working with or interest in hyperspectral and/or multispectral imaging, electrical-optical platforms a plus
- Hands-on experience with designing and building imaging setups for testing
- Image processing and digital signal processing experience
- Experience with image analysis, including signal quality and noise, optics, detector calibration, and pixel data processing
- Knowledge of sensor imaging systems, products, and exploitation processes
- Understanding of data processing and statistics
- Strong written and oral communication skills, with emphasis on technical issue debugging, experimental design and report writing
- Ability to work independently as well as part of a team in a dynamic work environment
- Familiarity with image classification using convolutional neural networks (CNN) a plus
- Experience with Python and/or embedded languages a plus
- Experience with data acquisition systems and instrument control
- Experience in troubleshooting complex instrumentation, including optical, electrical, mechanical, and software components