#### **Faculty Name:**

Dr. Elisa Konofagou

#### Faculty Email:

ek2191@columbia.edu

#### Lab:

UEIL

# **Project Title:**

GUI Development for Advancing Breast Cancer Detection through Ultrasound-Based Imaging

## **Description:**

We are offering an exciting summer internship opportunity focused on developing a userfriendly Graphical User Interface (GUI) using MATLAB for one of our ongoing works on finite element analysis of acoustic wave propagation in soft tissue, aiming to advance the detection and monitoring of breast cancer through ultrasound-based imaging. The intern will gain valuable insights into (1) ultrasound-based imaging applications in biomedical engineering, (2) acquire a basic understanding of finite element analysis for solving partial differential equations, and (3) develop proficiency in using MATLAB for analysis and GUI development. This role provides a unique chance to contribute to cutting-edge research and enhance your skills in a collaborative and dynamic environment. Basic familiarity with MATLAB is advantageous for this hands-on opportunity.

## Location of Research:

Hybrid (both Remote and On Site)

## # of hrs/week:

10

## Department/Program:

**Biomedical Engineering** 

## **Eligibility:**

BS, Third Year, BS, Fourth Year, MS

## To apply, please contact:

Dr. Tuhin Roy, tr2738@columbia.edu