FACULTY MENTOR
Vitaliy Lomakin

PROJECT TITLE
Graphics Interface for an Electromagnetic Simulator

PROJECT DESCRIPTION
The project involves adapting a general graphics user interface (GUI) of CAD software to be used with the electromagnetic and micromagnetic software developed at the Dept of ECE, UCSD. The GUI integration requires learning how to use the software and how to modify the parameters to make the GUI specific to the UCSD software. The adaptation also involves writing Python scripts or C++ codes for defining the GUI interface parameters.
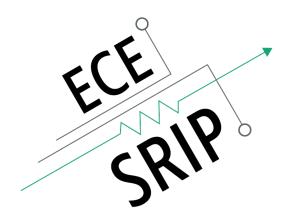
This project can accommodate both remote and in-person students.

INTERNS NEEDED
2 Students

PREREQUISITES
- General understanding of software and some experience in writing codes.

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PROJECT TITLE
Electromagnetic Losses in Human Body

PROJECT DESCRIPTION
The project involves the study of electromagnetic losses in the human body, which are due to the electromagnetic fields generated by a nearby antenna. The work involves running electromagnetic simulations and analyzing the results to identify efficient ways of calculating electromagnetic losses.

This project can accommodate both remote and in-person students.

INTERNS NEEDED
1 Student

PREREQUISITES
- ECE107 (Electromagnetism)