

FACULTY MENTOR Liu, Zhaowei

PROJECT TITLE Instrument for stroke therapy

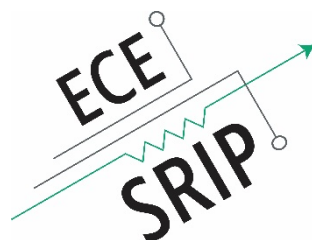
PROJECT DESCRIPTION

A stroke occurs when a vessel in the brain ruptures or is blocked by a blood clot. Stroke medical treatments work to either open the blockage or treat the rupture. We aim to build up a wearable prototype apparatus comprising various controllable pressure sensors and actuators that can be directly applied to a patient to facilitate the clot removal. We will have medical school and hospital collaborators to test the effectiveness of the prototype.

INTERNS NEEDED 1 MS Student AND 1 Undergrad Student

PREREQUISITES

The candidate should have basic knowledge about 3D modeling, 3D printing, machine shop work and strong hands-on skills.



FACULTY MENTOR Liu, Zhaowei

PROJECT TITLE LED based Li-Fi communication

PROJECT DESCRIPTION

Li-Fi is now the commonly used nomenclature for bi-directional, networked wireless communications using light, as opposed to traditional radio frequencies. We have a hands-on internship opportunity for highly motivated student to build a desktop Li-Fi system based on off the shelf LEDs. This project involves with putting LEDs, detectors and various electronic devices together and demonstrate a working communication system.

INTERNS NEEDED 1 MS Student AND 1 Undergrad Student

PREREQUISITES

The candidate should have basic knowledge about wireless communication, strong hands-on skills, comfortable to play with various electronics.

