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.