

Faculty Name:

Ioannis Kymissis

Faculty Email:

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Lab:

CLUE

Project Title:

Control of microLED array devices

Description:

Our group has been developing microLED arrays for use in superresolution microscopy applications. One of the challenges, however, has been the control of a large number of access lines for the devices. In this project the student will develop a controller using a high pin count FPGA and synchronize the illumination with the camera capture of multiple images. These images will then be reconstructed into computed images with a higher resolution than possible using a widefield image. Following validation the system will be used by our collaborators to map the brain activity in freely moving mice as part of a larger program centered at Colorado State University examining the learning associated with the olfactory response of animals.

Location of Research:

On Site

of hrs/week:

40

Department/Program:

Electrical Engineering

Eligibility:

BS, First Year, BS, Second Year

To apply, please contact:

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