

## **FACULTY MENTOR**

Duygu Kuzum

# **PROJECT TITLE**

Implantable Neurodevices

## **PROJECT DESCRIPTION**

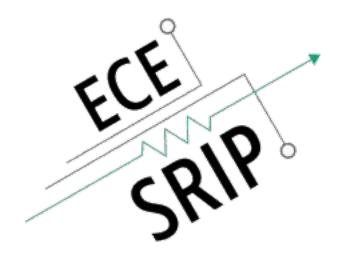
We develop implantable neurodevices which allow us to record brain signals with very high spatiotemporal resolution. WE are interested in investigating neural recordings to understand the dynamics of brain circuits related to learning and memory.

#### **INTERNS NEEDED**

3 MS or BS

#### **PREREQUISITES**

Students with interests in medical devices and background in big data analysis and signal processing would be great fit to this project.



## **FACULTY MENTOR**

Duygu Kuzum

#### **PROJECT TITLE**

Neuromorphic Devices for In-memory Computing

## **PROJECT DESCRIPTION**

We develop nanoelectronic devices for on-chip implementation of neural network algorithms. Our goal is to parallelize nonlinear operations needed for neural network computations and substantially reduce energy consumption for training neural networks in hardware.

# **INTERNS NEEDED**

3 MS or BS

## **PREREQUISITES**

Students who have backgrounds in devices or neural networks/machine learning would be great fit to this project.