Computer Science Intern for Neurobiology Laboratory:

Computer Science Students: Are you interested in participating in the new BRAIN Initiative Project? Want to get in on the ground floor and get your name on top journal articles? Come Join the Lab of Dr. Rafael Yuste as a student programmer.

The successful candidate should have some knowledge and experience in software engineering and analysis programs. Candidate will participate in the development of software- hardware interfaces for common neurobiology microscope and electronic devices as well as development and extension of existing Matlab/Python codes for analysis and interpretation of biological imaging and electrophysiology data. We are looking for someone who can work well with a team of biologists to flexibly translate analysis needs into easy to use software programs. An ideal candidate would be able to locate, interpret and expand capabilities of published code from neuro-computational labs.

After an initial test period, the position will be paid according to Columbia University’s salary scale for undergraduate students. A minimal commitment of 10 hours a week during the academic term with a full time summer commitment is expected. If the work is effective, authorship on lab publications in scientific journals will likely occur.

Interested candidates should email Dr. Julia Sable <js1719@columbia.edu>

Requirements:

• A current high school student in computer science and/or life sciences
• Prior experience with Arduino programming will be a plus.
• Strong background in use of biological statistics.
• Hands-on experience in the software engineering process: requirements gathering, design, implementation, testing and support of scientific users in an iterative and adaptive style.
• Hands-on experience in either MatLab, Python, object-oriented design and programming (Java, C++). Experience in GUI design and development would be a plus.
• Prior knowledge of Windows OS to aid users in installation and configuration of new PC systems.
• Ability to learn new technologies and techniques quickly without formal training.
• Ability to evaluate intangible variables, requiring regular use of ingenuity and creativity.
• Good oral and written communication skills and the ability to communicate with scientists who may not understand the details of software.