AMELIA L. BROWN

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143 Great Oak Lane
Pleasantville, NY 10570

Skills Summary

Python & Java Programmer – fluent, versatile, creative
Adept at quickly picking up new tools and techniques
Image Processing, Data Analysis, and Objected-Oriented Programming Experience
Other languages/skills: Fiji, excel, regex
Exposure to C++, Matlab, and git
Strong presentation and communication skills, team player

Experience

Memorial Sloan Kettering Cancer Center

2017-present, Programmer and Lab Assistant Intern

Image processing and data analysis at a developmental biology lab directed by Dr. Mary Baylies that uses drosophila (fruit flies) as a model organism to study muscle development (mskcc.org/research/ski/labs/mary-baylies). Duties included interacting with scientists directly to identify and define automation requirements and quantification needs, continuous communication with scientists throughout development, automation of simple image processing and quantification using Fiji, statistical and volumetric calculations for microscope image stacks, coordination and collaboration on a Matlab project tracking cells in a dish and subsequent processing, analysis and visualization of produced data.

Publication and Code Repository

S. Windner, A. Manhart, **A. Brown**, A. Mogilner, M Baylies, "Nuclear Scaling is Coordinated among Individual Nuclei in Multi-nucleated Muscle Fibers" Developmental Cell, Vol 49, Issue 1, p48-62, April 8, 2019.

General python utilities package I made for my own use: http://github.com/in-tension/brutils

Education

SUNY Potsdam Freshman 2017-2018
Pleasantville High School 2016

Advanced Placement Scholar