

FAITH A OCITTI

faith.ocitti@tufts.edu | 615-424-1914 | focitti.github.io

EDUCATION

Tufts University (2015 – present), Medford, MA

Majors: Biomedical Engineering, Computer Science

Relevant Coursework: Data Structures, Machine Language and Assembly Language Learning, Probability and Statistics, Discrete Mathematics, Genetics, Quantitative Physiology, Principles of Controlled Release and Drug Delivery, Principles of Medical Imaging, Human Factors in Product Design

Groton School (2014 – 2015), Groton, MA

Maru-a-Pula School (2011 – 2013), Gaborone, Botswana

RESEARCH EXPERIENCE

Tufts University, Medford, MA

September 2017 – Present

Biomedical Signal Processing Research

- Developing a statistical model to find a relationship between drugs and their effect on gene expression.
- Investigated several machine learning algorithms to characterise [Connectivity Map](#) data.
- Improving the signal-to-noise ratio inherent of microarray data using selective averaging and principal component analysis.

Tufts University, Medford, MA

May 2017 – August 2017

Computational Biology Research Intern

- Implemented R package to encapsulate method for Temporal Modelling of Pathway Outliers.
- Created user friendly R scripts to allow for easy package navigation.
- Analysed TEMPO results for age-related patterns of gene expression specifically for pathways involving retinopathy of prematurity, bronchopulmonary dysplasia and autisms.

LEADERSHIP & ACTIVITIES

Tufts Mountain Club

September 2015 – present

Vice President (January 2018–present); Student Outreach Director (January 2017–December 2017)

- Helped create Student Outreach Director position to foster better communication between members of the club and the executive board
- Implementing programmes to encourage members of the Tufts community to participate in the outdoors
- Creating first-year specific programmes to introduce incoming students to the outdoors and ease transition to university

Tufts Active Minds – A student run mental health advocacy group

September 2015 – present

Group of Six Liaison (January 2016–present)

- Created this position to facilitate a more diverse conversation of mental-health.
- Collaborated with the Africana, International, Women's, LGBTQ, Latino and Asian-American Centres to achieve this conversation
- Organised the Mental Health Monologues in April 2016 which won the "Active Minds Programming Innovation Award"

SKILLS

Coding Languages: C++, C, HTML/CSS, JavaScript, R, MATLAB

Technologies: UNIX, LINUX, Git, Heroku, NodeJS, LATEX, SQL

Interests: Travelling, hiking, biking, people, stories and breakfast foods.