michelle ragsac

linkedin.com/en/michelleragsac   github.com/mragsac   mragsac.github.io

Contact
mragsac@ucsd.edu
(650) 391-6269

1416 Monte Diablo Ave
San Mateo, CA

Education
University of California, San Diego
B.S. Bioengineering: Bioinformatics
2013 - Present (Expected 2017)
Overall GPA: 3.48 / Major GPA: 3.59

Achievements
Fall 2015 / Presentation: BMES Annual Meeting

Summer 2015 / Presentation: Sierra Systems and Synbio Symposium

Spring 2015 / Provost Honors

Spring 2015 / Presentation: Scripps Undergraduate Research Symposium

Fall 2014 / Provost Honors

Fall 2014 / People's Choice Award: National Academy of Engineering Engineering for You Video Contest

Relevant Courses
- Computational Molecular Biology
- Algorithms in Computer Science
- Advanced Data Structures in C++
- Basic Data Structures & OO Design
- Introduction to Java Programming
- Discrete Mathematics for CompSci
- Molecular & Cell Biology
- Metabolic Biochemistry
- Organic Chemistry
- Genetics

Memberships
2013 - Present
Biomedical Engineering Society

Experience

Scripps Institute of Oceanography
Laboratory of Computational Genomics / Nov 2014 - Feb 2016
Undergraduate Researcher | La Jolla, California
- Gained exposure to analyzing mouse RNA-Seq with enrichment analysis to identify genes and pathways causing spinocerebellar ataxia type 7 (SCA 7)
- Utilized bioinformatics tools (e.g. oPOSSOM) to search for sequences of genes involved in peroxisome biogenesis disorders (PBD) and peroxisome defects (PDs) for over-represented upstream binding sites and their associated transcription factors
- Screened various experiments involving RNA-Seq data through the Quiagen Ingenuity Pathway Analysis (IPA) software for associated canonical pathways and upstream regulator analysis

Sanford Consortium for Regenerative Medicine
Albert La Spada Laboratory / Feb 2014 - Oct 2014
Research Lab Volunteer | La Jolla, California
- Completed HEK293 and NSC culture maintenance, transfection, and agonist drug treatment to determine associated proteins of the Huntington's Disease (HD) pathway

University of California, San Diego
Sixth College CAT Writing Studio / Aug 2015 - Present
Writing Studio Mentor | La Jolla, California
- Acted as a mentor for other undergraduate students to help them build confidence in their writing abilities; looked at student papers to analyze grammar, overall structure, and general content

Leadership

Biomedical Engineering Society; University of California, San Diego
Vice-President Internal / June 2015 - Present
Managed the Biomedical Engineering Society student chapter officer board as well as tasked to maintain a strong membership base; learned how to maintain and update the organization website; oversaw the professional development of officers by providing progress reports and presentation critique

Lab Expo Chair / Sept 2014 - June 2015
Planned location, budget, and participant logistics of an annual undergraduate research exposition; coordinated and developed event publicity; taught committee members professional development skills, including email communication and public speaking basics

Publicity/Webmaster Chair / Sept 2014 - June 2015
Created professional graphics for publicization of organization image and events through print and digital media; photo-documented events and post-processed pictures

Undergraduate Bioinformatics Club; University of California, San Diego
External Officer / June 2015 - Present
Responsible for external relationships outside of the UC San Diego campus as well as actively seeking opportunities for collaboration with academic and industry partners; assisted in general event-planning for the club

Skills

Programming
- Familiar with Java, Python, & C++
- Exposure to SAMTools
- Exposure to Bowtie
- Comfortable with Linux/UNIX Environment

Laboratory Skills
- Mammalian/Bacterial Culture
- Transfection/Transformation
- Gel Electrophoresis
- Agar, Media, and Solution Prep
- Column Chromatography Techniques
- ELISA
- PCR