Tammy Ma

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EDUCATION:

Senior, University of Pittsburgh, School of Computing and Information | Expected Graduation Date: 04-2019

Cumulative GPA: 3.74

Major: Computer Science   **Minor:** Statistics   **Related Area:** Biology

RELEVANT COURSEWORK:

Skills: Java, C, Python, PHP, R, SQL, MATLAB, Linux, HTML/CSS/JS

Courses: Biology I & II, Organic Chemistry I, Bio Research Lab, Intermediate Java, Linear Algebra, Statistical Data Science, Applied Regression, Data Structures, Computer Organization & Assembly Language, Algorithm Implementation, Systems Software, Formal Methods in CS, Software QA, Operating Systems, Differential Equations

HONORS:

Full Tuition Honors University Scholarship –University of Pittsburgh	2015-19
NCWIT (National Center for Women & Information Technology) Collegiate Award Finalist	2018
Blue Stars Red Carpet Award for leadership in a student organization	2018
University of Pittsburgh Grace Hopper Celebration Scholarship	2017
Alcatel-Lucent Scholarship	2015-19
Dean's Honor Roll	2015-18

RESEARCH/WORK:

MailChimp Software Engineering Intern — Summer 2018

Software Engineering Institute, Emerging Technology Center Intern –Carnegie Mellon University — January-April 2018
- Wrote scripts to automate audio processing and worked on a user interface to collect labels for downstream machine learning as part of a DoD-funded project on machine emotion recognition

Network Security Summer Associate –University of Pittsburgh Medical Center — June –August 2017
- **End-of- Life Project:** Monitored traffic/policies and identified firewalls to be slated for decommissioning, arranged for physical removal of device, **ClinicalVPN Project:** Relayed traffic for clinical firewalls to their local support for first line troubleshooting

Research Assistant –Computational and Systems Biology Dept., University of Pittsburgh — 2016-2017
- **TECBio REU:** One of fifteen scholars selected from pool of over 300 applicants to NSF-funded computational research program
- Third author of paper currently in submission process, "Statistical Color Appearance Normalization for Histological Images"

Projects:
- Created an interactive GUI program to gather data on pathologists' preferences for digital slide images
- Wrote MATLAB scripts for comparing color similarity in RGB, HSV, and stain vector color space across thousands of image pairs
- Wrote MATLAB scripts for visualizing histology stain colors from image data

Intermediate Java and General Chemistry Undergraduate Teaching Assistant — 2017, 2016
- Led weekly recitations and taught students concepts covered in lecture
- Oversaw and graded recitation labs and homework, offered personal assistance during office hours

She Innovates Hackathon –University of Pittsburgh — January 2018
- FWD, a "pay it forward" website/app for users to pay for a person's next meal
- Team won "Best Google Cloud Platform Hack"

Diabetes Research Assistant –John G. Rangos Sr. Research Center, UPMC — January-April 2016
- Frozen section cutting, slide preparation and immunohistochemistry staining, cell culture, mouse islet isolation

Digital Pathology Research Assistant –University of Kansas Medical Center — May-August 2014
- Performed annotations and image analysis of ovarian tissue microarrays using Aperio digital pathology software
- Contributing author in paper published in *Oncogene –Nature* ("The histone demethylase KDM4B regulates peritoneal seeding of ovarian cancer")

LEADERSHIP/EXTRACURRICULAR:

Women in Computer Science Club — 2015-Present
Vice-President (2017-19), Business Manager (2016-17)
- Organize/lead weekly general body meetings, provide mentorship to club members, plan group events and outings

Global Brigades — 2016-2018
Executive Board Programming Chair (2017-18), Secretary and Treasurer (2016-17)
- Coordinate speakers and plan brigade-wide events (International Pre-Trip Conference for GB chapters in the Northeast region), coffeehouse discussions, and social events
- Responsible for record keeping at board meetings and all communication with members and other organizations
- Manage club transactions, assist in planning and leading biweekly general body meetings

University Honors College Peer Mentor — 2016
- Served as an Honors College mentor for seven incoming freshmen throughout their first year at Pitt
- Responsible for individual evaluations and checkups with mentees

University of Pittsburgh Symphony Orchestra — 2015-2017