Shania Tarble

500 College Ave, Swarthmore PA, 19081
starble1@swarthmore.edu | (610) 328-8352
www.sccs.swarthmore.edu/users/15/starble

EDUCATION

Swarthmore College | Swarthmore, PA   May 2023
Candidate for Bachelor of Arts with Honors in Computer Science, Course Major in Behavioral Economics, Honors Minor in Psychology
Cumulative GPA: 3.45; *Computer Science GPA*: 3.56 (6 courses)

HONORS

First Place Winner, SPLASH Conference ACM Undergraduate Student Research Competition
Runner-Up, 2022 CRA Outstanding Undergraduate Researcher Award
Recipient of the William Randolph Hearst Scholarship

PUBLICATIONS AND CONFERENCES

- Author, Presenter: Shania Tarble, "Efficient Implementation of the Plaid Language," Proceedings of Systems Programming Languages and Applications: Software for Humanity (SPLASH), Portland, OR, October 2022.
- Presenter, Shania Tarble and Anne Marcus, North East Music Informatics Special Interest Group (NEMISIG), Philadelphia, PA, January 2022.
- Coauthor, Cary Smith, Shania Tarble, Jared Jones, Jonah Michaels and Seth McGregor, "An Integrated Monitoring System for Mobile Phones," Proceedings of the 1st International Workshop on Sensing for App Phones (Phone-Sense), Zurich, Switzerland, November 2021.

PROFESSIONAL EXPERIENCE

Carnegie Mellon University Summer Researcher   May - August 2022
Carnegie Mellon University, Institute for Software Research | Pittsburgh, PA
- Wrote code generator and runtime for compilation from CMU's Plaid language to JavaScript
- Developed novel representation for state at runtime, optimized state change
- My work on this project won first place in the undergraduate division of the ACM Student Research Competition at the SPLASH Conference

University of Notre Dame REU Participant   June - August 2021
University of Notre Dame | South Bend, IN
- Conduct research in ambient sensing, including smartphone app design and implementation
- Developed algorithm to analyze pace and count strides with accelerometer data
- Included research paper, presentation components; second place in poster competition

Computer Science Teaching Assistant, Head Teaching Assistant   September - December 2020
Swarthmore College | Swarthmore, PA
- Selected as Head TA when department's Director of Student Services found a new job; took on responsibility for training new TAs, some coordination duties, and biweekly review lectures

Games and Strategies Teaching Assistant   September 2020 - Present
Swarthmore College Department of Economics | Swarthmore, PA
- Hold office hours, guide students in Game Theory/Strategic problem-solving process
- Write answer keys and evaluate student work

LEADERSHIP EXPERIENCE
Computer Science Hiring Committee Member | Swarthmore College   January - May 2021
- Selected as the only student member of the search committee to hire a new professor

Co-Founder, Women in CS Organization | Swarthmore College Spring 2018-present
- With three others, planned and created a group to support female entrants into CS Department

Student Philanthropy Council, Swarthmore College   Fall 2020 - present
- Nominated for and eventually selected for volunteer position on Student Philanthropy Council

Drama Board Co-Coordinator and Web Master | Swarthmore College   January - 2019 - present
- Manage $15,000 Drama Board budget, allocate to student-run productions
- Designed DB website using Java

Spanish Immersion Counselor, Concordia Language Villages | Minneapolis, MN   June - July 2019
- Initiated lesson and activity ideas, managed schedules, motivated students, individual teaching and presentation duties

SKILLS
- **Operating Systems**: Linux, UNIX, Mac OSX, Windows, Android, iOS

- **Programming Languages**: Python, C++, C, Objective C, Racket, Java, HTML, CSS, PHP, JavaScript, MATLAB

- **Miscellaneous**: MySQL, PostgreSQL, OpenGL, CUDA

- **Languages**: English, Spanish