## Alexandra Plukis

### Junior in Computer Science at Arizona State University

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#### **EDUCATION**

**Arizona State University**, Tempe, AZ — Computer Science B.S.

Expected Graduation: May 2021

- University GPA: 4.12, Major-Specific GPA: 4.20.
- Historian for Women in Computer Science, Residential Hall Peer Mentor, and Teaching Assistant for ASU 101: The ASU Experience.

Ravenwood High School, Brentwood, TN — Diploma with Honors

August 2013 - May 2017: GPA: 4.00

#### PROFESSIONAL EXPERIENCE

**Ira A. Fulton Schools of Engineering,** Tempe, AZ: *Engineering Futures Mentor* May 2018 - Present

- Planning, marketing, and organizing educational and outreach events leading to an increase in student involvement.
- Mentoring computer science students in personal projects and career opportunities, with academic and personal problem-solving for first year students.
- Improving retention in engineering, especially for minority and first generation students.

## **Swift Workshop and Classes**, Tempe, AZ: *Organizer and Leader* December 2018 - Present

- Leading workshops to help students get started with Swift/Xcode.
- Organizing materials, workshops, and classes to learn Swift with a community.
- Creating and completing activities with students to create a structured independent learning environment.

#### RESEARCH

**NSF REU (Research Experience for Undergraduates)**, George Mason University - *Paper in Progress*. Summer 2019.

- Researching the connection between college course evaluations and computer science student success.
- Processing course-specific data, faculty evaluations, and student demographics data through various machine learning-based classifiers, and analyzing for fairness.
- Working with large amounts of data: cleaning, pre-processing, and managing 10 years of student information.
- My role was defining the project, working on the code, cleaning data, presenting updates, and creating final deliverables.

# Integrating Protein Quality and Quantity with Environmental Impacts in Life Cycle Assessment — Published, Sustainability (Volume 11, Issue 10)

- Researching the intersection of protein quality, serving sizes for consumption, and environmental impact for the purpose of consumer knowledge.
- My role was researching the proteins being tested, contributing to the algorithm for synthesizing the information, and focusing the scope of the research.

#### **SKILLS**

Data mining and data science experience using Python libraries pandas and scikit-learn.

Python and C/C++. Novice in Java, Swift, and MIPS.

UML, accessibility, and error handling.

Team management and event planning.

Effective communicator in team settings.

Motivated self and group learner.

Creative problem solver, especially in the face of constraints.

Fluent in Polish.

#### **AWARDS**

Grace Hopper Celebration Scholarship Recipient. 2019.

National AP Scholar. 2017.

National Merit Finalist. 2017.

New American Scholar National Merit Scholarship. 2017.

ASU Dean's List. 2017-2019.

#### **PROJECTS**

**Personal Website**, HTML, CSS, Javascript: September 2019, continual improvements. My personal website utilizes concepts of accessibility while maintaining a cohesive visual theme. This website uses animations, downloads, and responsive elements.

Web Scraper with Alert, Python: July 2019. Using BeautifulSoup, yagmail, and crontab to scrape a website and send an email to myself whenever my favorite recipe author posts a new recipe.

Personal Goals App, Swift: Current Project. Mobile app that tracks progress on daily goals, allowing the user to save each day's data.

This project makes use of UIKit and FileHandle, and the next version will implement data persistence capabilities with CoreData.