

SORAYA REMAILI

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EDUCATION

B.S. in Computer Science and B.S. in Statistics with Honors

GPA: 4.0/4.0 | University of South Carolina Honors College, Columbia, SC, Exp. May 2027

Advanced High School Diploma

Thomas Jefferson High School for Science and Technology, Alexandria, VA, June 2023

GPA: 4.45/4.0 (weighted scale) | AP Scholar with Honors | Oceanography Senior Research

Summer Certification

The Paris Institute for Political Science, Paris, France, July 2022

Final Grade: 17.75/20 | Focus on International Negotiation and Affairs

Relevant Coursework: Refugees & Migrant Issues, Populism and Democracy, Human Security

HONORS AND GRANTS

University of South Carolina President's List (2023-Present)

South Carolina Honors College Undergraduate Research Grant- \$3000

Carter Bays Endowed Scholarship for Computer Science - \$1000

University of South Carolina Academic Excellence Scholar - \$2000/year

University of South Carolina Undergraduate Scholarship - \$25000/year

POSTERS

North Atlantic Right Whale Consortium, October 2024

Erin Meyer-Gutbrod, Catherine R. Edwards, Abigail M. Kreuser, Amadi A. Sefah-Twerefour, Karen Dreger, **Soraya Remaili**. Pilot program for glider-based Passive Acoustic Monitoring of right whales in the Southeast US calving ground.

RESEARCH EXPERIENCE

Bioacoustics, USC School of the Earth, Ocean, and Environment, 2024-Present

- Analyzes data to identify baleen whale presence, using Python, Raven, R, and the LFDCS
- Compares detection methods based on accuracy rates to guide whale conservation efforts
- Conducts real-time acoustic data processing and classification, ensuring precise results
- Applied advanced skills in RStudio and Python for statistical analysis and data visualization

Research Director: Dr. Erin Meyer-Gutbrod

Skills: Low-Frequency Detection Classification Software, R, RStudio, Python, Raven, real-time analysis, acoustic data processing, UNIX/LINUX

National Oceanic and Atmospheric Administration Real-Time Analysis Workshop, May 2024

- Gained experience in real-time data analysis techniques used in environmental monitoring
- Collaborated with NOAA scientists and peers to analyze real-time data from marine ecosystems

- Participated in simulations and case studies, developing skills in analyzing real-time environmental data

Oceanography, Thomas Jefferson High School for Science and Technology, 2021 - 2023

Jellyfish as Ecosystem Bioremediators and their Effect on Water Contamination Levels

- Developed skills in jellyfish care, ensuring optimal tank conditions for accurate data collection
- Authored a research paper summarizing findings for aquatic ecosystem restoration
- Presented research findings, demonstrating effective public speaking and scientific communication skills

Research Director: Dr. Shawn Stickler | Presented at the tjStar Research Symposium

Skills: Research paper writing, jellyfish handling/care, tank maintenance, water quality analysis, experimental design, lab equipment care, aquatic ecosystem management

Solar Cells, Thomas Jefferson High School for Science and Technology, 2019-2020

Investigating Fruit Dye Efficacies in Dye-Sensitized Solar Cells

Research Directors: Integrated Biology, English, and Technology Team at TJHSST

Skills: Micropipetting, Bradford assays, bacterial plate streaking, DNA chromatography

LEADERSHIP AND COMMUNITY EXPERIENCE

Service Chair/DEI Chair, Theta Tau Professional Engineering Fraternity, Spring 2024/Fall 2024

- Co-led Theta Tau's service and DEI committees, aligning projects with organizational goals
- Utilized data-driven approaches to analyze project outcomes, ensuring continuous improvement
- Managed budgets and resources for service projects, securing additional funding when needed

116th Student Senate Student Senator, USC Student Government, Spring 2024-Present

- Advocates for student interests by proposing legislation to improve campus policies and resources
- Participates in committee discussions to evaluate policies and ensure alignment with student needs
- Engages in communication with constituents, gathering feedback to inform decision-making processes

Fairfax County Summer Programs, Technology Adventure Camp Instructor, July 2024

- Taught children foundational robotics concepts, coding, and sensor technology in a hands-on environment
- Designed and facilitated engaging activities to teach computer skills and programming languages
- Demonstrated how to build and program basic robots, helping students develop skills in technology

PROJECTS

DegreeBetter Academic Management System

- Full, back-to-frontend development of a degree planning system using Java, FXML, and Git
- Developed the backend system using Java to handle user data, course requirements, and degree tracking
- Utilized Git for version control, ensuring collaborative development and efficient codebase management
- Integrated dynamic data validation and error-handling features to improve system stability

Personal Website and Portfolio

- Developed a responsive portfolio website using HTML and CSS for the CSCE 190 final project
- Designed custom layouts and interfaces in Figma for a clean, user-friendly experience
- Used Git for version control to manage project updates and push changes to GitHub

Data Structures & Algorithms in Java and C++

- **AuthorsNovels** | Created a sorted, searchable directory of authors and their book titles
- **PigLatin** | Wrote code that that can translate any string into Pig Latin
- **AdjList** | Explored the concepts of depth and breadth-first searches

SKILLS

French - Professional working proficiency | Virginia State Seal of Biliteracy Recipient

Technical - R | Python | C++ | Java/JavaFX | Git & GitHub | Raven | HTML/CSS | FXML | LFDSCS

CITI Certifications - Physical Science Responsible Conduct of Research | Social and Behavioral Responsible Conduct of Research