



# Internships in Marine Geography

## 2019 Report



# 2019

## Table of Contents

● Introduction	3
● Partner Organizations	4
● Meet the Team	5
● Intern Demographics	6
● Program Evaluations	7
● Acknowledgements	8
● Intern Reflections	9
● Quotes from Supervisors/Staff	10
● Career Workshop	11
● Intern Biographies	13
● Position Overviews	15
● Conclusion	19





# Introduction

The Office of Coast Survey (OCS) and Greening Youth Foundation (GYF) collaborated for a second year to coordinate the 2019 Internships in Marine Geography Program. This year, we placed four interns at two national marine sanctuaries as well as two Coast Survey offices. These amazing college and recent graduate students supported NOAA's mission by completing vital marine science-based projects, gaining on-the-ground experience and gaining an understanding of the importance of the need to preserve our marine sanctuaries and natural environments. With our combined efforts of planning, outreach and recruitment, we were able to find the most qualified candidates. We continued these efforts throughout the program by mentorship, site visits, career workshop, post-internship report and final evaluation of the program. By the end of the summer, the interns were able to gain important career-building skills at some of the most beautiful places in the United States. To close out the program, the interns attended a career workshop in Silver Spring, Maryland where they were able to connect with each other. They each had the opportunity to present their projects in front of supervisors, mentors, as well as NOAA and GYF staff. They also had the opportunity to fellowship, attend panel discussions about federal job opportunities, the hiring process and network with federal agency employees currently working in the field. By the end of the workshop, the interns left feeling inspired to continue pursuing their passions and dreams in the field.

## Program Objectives:

- Encourage a diverse group of young adults to study and pursue careers in Science, Technology, Engineering, and Mathematics (STEM) field.
- Provide meaningful and relevant science-based internships to individuals from underrepresented groups in the STEM fields.
- Introduce and mentor program participants to science careers in NOAA.
- Increase relevancy, diversity, and inclusion in the NOAA workplace.

## 2019 Accomplishments:

- Received over 200 applications for the program: Hydrographic Survey Intern: 74 applications, Community Outreach Intern: 51 applications, Research Education Intern: 56 applications, and Navigation Services Intern: 41 applications
- Expanded the location of sites and offered positions in Michigan, Seattle and Massachusetts
- Conducted a successful career workshop in Silver Spring, Maryland
- Presented interns projects to colleagues and staff at the NOAA Silver Spring Campus
- Conducted successful site visits with interns and supervisors

# Partner Organizations

The Internships in Marine Geography Program is supported by a dedicated team at the National Oceanic and Atmospheric Administration and the coordinating organization, Greening Youth Foundation. The selection of host sites, promotion of the program, recruitment, hiring of interns, site visits, organization of culminating intern workshop, and programmatic reports required a year of effort by NOAA and GYF. The success of this program is due to tremendous support of all aspects of the Internships Marine Geography Program. Greening Youth Foundation appreciates the opportunity to be involved in such a valuable program that promotes youth engagement, empowerment, and diversity within the STEM field.



Greening Youth Foundation | [www.gyfoundation.org](http://www.gyfoundation.org)

The Greening Youth Foundation's mission is to work with diverse, under-served and under-represented children, youth and young adults in an effort to develop and nurture enthusiastic and responsible environmental stewards. GYF's cultural-based environmental education programming engages youth from local communities and exposes them to healthy lifestyle choices in order to create an overall healthy community. GYF believes that youth and young adults from diverse backgrounds can greatly benefit from the career opportunities presented within the state and federal land management sectors. Accordingly, GYF continues to develop and strengthen partnerships with land management agencies to provide service internship opportunities for youth and young adults thereby creating pathways to conservation careers.



National Oceanic & Atmospheric Administration | [www.noaa.gov](http://www.noaa.gov)

NOAA's history is an essential part of the history of the U.S. and the development of its science and commercial infrastructure. In 1807, President Thomas Jefferson created the U.S. Coast Survey to provide nautical charts that would help the young nation with safe shipping, national defense and maritime boundaries. Today, NOAA continues to work to inform the public of changing environments around them through daily weather forecasts, severe storm warnings, climate monitoring to fisheries management, coastal restoration and supporting marine commerce.

# GYF Team



Eboni Preston  
*Director of Programs*



Christine Louis-Jacques  
*Project Manager*



Adrienne Byrd  
*Director of Finance*

# NOAA Team



Amanda Phelps  
*Budget Analyst*



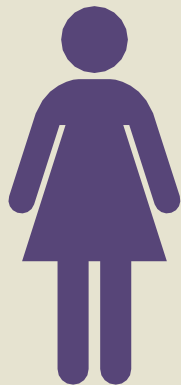
Kathleen Jamison  
*Chief Resource Management Staff*

# Intern Demographics

## Gender



1



3

## Level of Education



Undergraduate  
Student

3

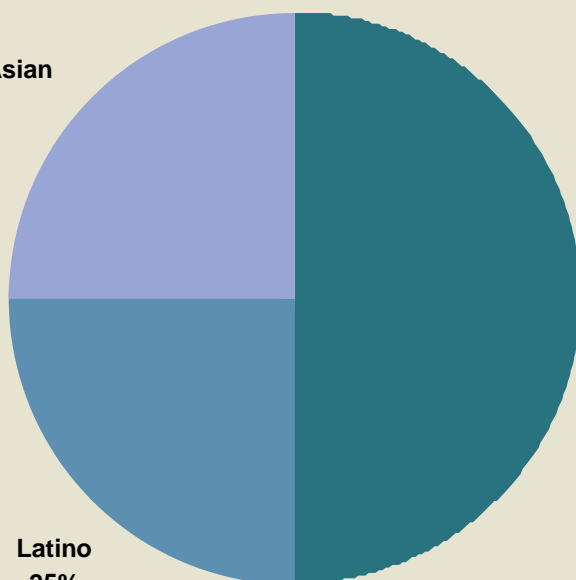


Recent  
graduate

1

## Race/Ethnicity

Asian/Southeast Asian  
25%

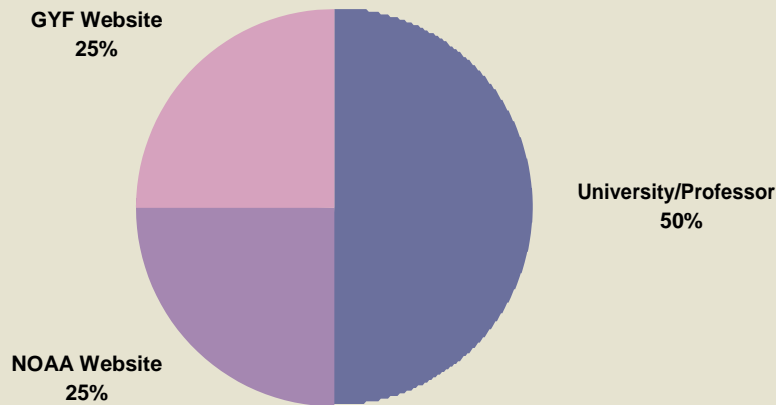


African American  
50%

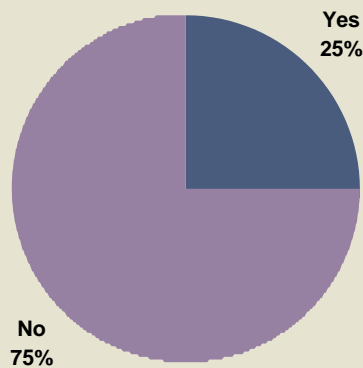
Latino  
25%

# Program Evaluations

How did you hear about the internship program?



Have you had an internship with GYF before?



After this internship experience, I feel more confident about my career goals and prepared to apply for jobs with the federal government?



**Yes**  
**100%**

# Acknowledgments

The Greening Youth Foundation would like to express sincere gratitude and appreciation to both the Office of Coast Survey and National Oceanic & Atmospheric Administration for their invaluable work and guidance to the interns throughout the course of the internship program. We would especially like to thank the interns for giving us the opportunity to place them in selected marine sanctuaries and offices for this unique and enriching experience.

Lastly, thank you to all the NOAA supervisors and staff for mentoring and motivating the interns throughout their experiences and projects. Without the efforts and service of Amanda Phelps, Kathleen Jamison, Anne-Marie Runfola, Anne Smrcina, Sarah Waters, Lucy Hick, Barry Gallagher, Peter Holmberg, and Olivia Hauser this program would not have been a success!





# Intern Reflections

Lillian Dinkins | Hydrographic Survey Intern

NOAA Wester Regional Center (Seattle, WA)

*"Through The Greening Youth Foundation, I was able to have this opportunity to figure out what NOAA is really about! There is an opportunity there for everything and in the span of ten weeks, I was able to learn and pick up skills using tools I never thought existed. This experience was one for the books and an eye opener to how big the field of environmental sciences actually is. I was beyond happy with the people I worked with and the knowledge I gained. This was such a valuable time, and I enjoyed my work!"*

Justin Pinero | Community Outreach Intern

Thunder Bay National Marine Sanctuary (Alpena, MI)

*"I learned a lot of amazing things from this experience but I think one of the most important things I learned was actually about myself. I learned just how much I actually know, which may seem like a silly thing, but talking about so many topics with so many people really helped me see just how knowledgeable I was in my subject area. --*

Maya Garrison | Research Education Intern

Stellwagen Bank National Marine Sanctuary (Scituate, MA)

*-I appreciate that education and outreach at Stellwagen Bank attempts to challenge the lack of diversity in education and outreach by adapting its tactics to include and invest in groups that are underrepresented in science, conservation, and nature spaces.*

Nidhi Mehta | Navigation Services Intern

NOAA Office of Coast Survey (Silver Spring, MD)

*"Since a large portion of my projects involved sonar data, a huge highlight of my experience was being able to board the Bay Hydro II vessel and see a multi-beam and side-scan sonar in action!"*

# Quotes From Staff

Peter Holmberg | Products Team Lead (Pacific Hydrographic Branch)

*Our office is fortunate to have Lillian working with us this summer. She has been a quick learner in the realm of hydrographic survey and our data processing practices. I finished a review of her first assignment and it was on par with that of our NOAA employees. She has the right balance of asking for consultation from us in matters that need an experienced hydrographers perspective, but for all else she is quite self sufficient. Her attention to detail and professional conduct are excellent.*

## Media

Lillian and Nidhi were featured on the Office of Coast Surveys Bi-Weekly Newsletter introducing their internship positions within NOAA for the summer.

To read full article visit: [https://nauticalcharts.noaa.gov/ocs-biweekly/index\\_19jun19.html](https://nauticalcharts.noaa.gov/ocs-biweekly/index_19jun19.html)

 office news

### Staff Updates

Coast Survey's Internships in Marine Geography's main objective is to encourage young adults to study and pursue careers in the STEM field and by providing meaningful internships to individuals from underrepresented groups. This year, the program has two interns at Coast Survey and two with the Office of National Marine Sanctuaries. These internships are made available through NOAA's partnership with the [Greening Youth Foundation](#). Welcome to Coast Survey's two new interns!



Lillian Dinkins.

**Lillian Dinkins** is a senior studying environmental science/wildlife at Tuskegee University in Alabama. Lillian is originally from Savannah, Georgia, but was raised in Atlanta and has a love for nature and the outdoors. This summer, Lillian is working at PHIB as a hydrographic survey intern where she assists with hydrographic survey reviews for the national bathymetric source project.



Nidhi Mehta.

**Nidhi Mehta** is a rising senior at Vanderbilt University, studying computer science with a minor in Earth and environmental science. Nidhi is originally from east Tennessee. This summer, she will be working under Lucy Hick, Customer Affairs Branch chief, to create a story map for the NRTs and helping out with Python development.

# Career Workshop

August 5-9, 2019

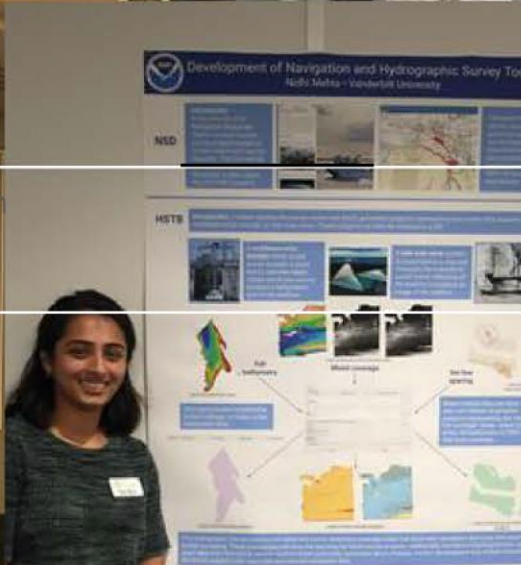
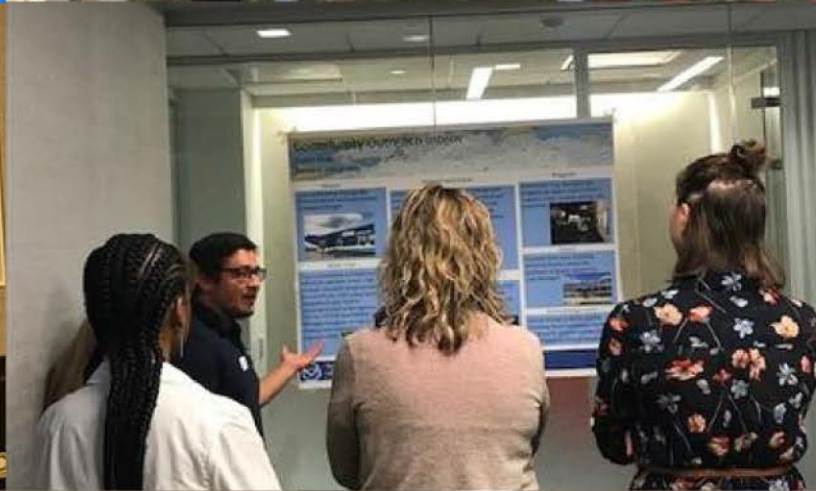
The interns traveled to Silver Spring, Maryland for a three day career workshop to complete their internship. The first two days of the workshop were filled with eye-opening, informative experiences and discussions about working in the federal government within conservation. The interns presented their projects orally or in a poster presentation in front of supervisors, mentors, NOAA and GYF staff. They interacted in sessions about financial literacy, diversity and inclusion within the STEM field, resume building, and the federal job application process. They also got to listen in on a panel discussion with young professionals that shared their journeys of aligning with their passions for a career in STEM. We wanted to provide the interns with an opportunity to see how diversity shapes stories, history, and culture.

After the presentations, the interns enjoyed a kayaking trip to at Mallow's Bay, the newest sanctuary added to the Office of National Marine Sanctuaries. The field trip was a huge highlight and a perfect way to wrap up the career workshop.

## Objectives:

- Present interns' project results to their peers and NOAA and GYF management
- Learn about science careers, needed skills, and how to apply for federal science positions
- Participate in facilitated discussion about the value of diversity in the workplace and whether any issues were encountered during the internship;
- Visit one of the participating parks and learn about the intern's projects; and
- Obtain feedback on the program, projects, and intern experiences







# Intern Biographies

## Lillian Dinkins | Tuskegee University

Hydrographic Survey Intern

NOAA Western Regional Office

Seattle, Washington



Lillian Dinkins is a senior at Tuskegee University studying Environmental and Wildlife Science. This summer, Lillian worked as the Hydrographic Survey Intern at the NOAA Western Regional Office in Seattle, Washington. After graduating, Lillian plans to get a masters degree in Natural Resources and continue to share her love for wildlife and natural resources with others. Her hobbies include dancing, running and exploring the outdoors!

## Maya Garrison | Coastal Carolina University

Research Education Intern

Stellwagen Bank National Marine Sanctuary

Scituate, Massachusetts



Maya is a recent graduate from Coastal Carolina University and holds a degree in Marine Science. She worked as a Research Education Intern at Stellwagen Bank National Marine Sanctuary in Scituate, MA. Her interests lie in conservation and environmental education. A long term goal of hers is aligning both in a successful career while exploring more areas of interest within the science field. A few of her hobbies include laying in her hammock, almost all outdoor activities, and eating.

## Justin Pinero | Stetson University

Community Outreach Intern

Thunder Bay National Marine Sanctuary

Alpena, Michigan



Justin is a senior at Stetson University in DeLand, Florida majoring in Biology. He worked as the Community Outreach Intern for NOAA at the Thunder Bay National Marine Sanctuary in Alpena, Michigan. Justin hopes to take his passion for animals and the outdoors to someday work in wildlife conservation doing field research. He wants to be a part of something bigger than himself to further spread awareness about conserving nature and the biodiversity among the environmental challenges we face today. Justin loves the outdoors and doing a variety of kayaking and hiking, whether through swamp or the forest.

## Nidhi Mehta | Vanderbilt University

Navigation Services Intern

NOAA Silver Spring Metro Campus

Silver Spring, Maryland



Nidhi is a junior at Vanderbilt University majoring in Computer Science with a minor in Earth and Environmental Science. This summer, she worked as the Navigation Services Intern at the National Oceanic and Atmospheric Administration Office of Coast Survey in Silver Spring, Maryland. Her dream is to utilize her technical background to design creative and effective solutions for the biggest problems our planet faces today. After graduating, she plans to pursue a career in sustainability in a role that combines her two passions - computer and environmental science. In her free time, Nidhi enjoys partaking in just about any outdoor activity, experimenting in the kitchen, and hacking around with various computer science tools and technologies.

# Position Overviews

Lillian Dinkins  
Hydrographic Survey Intern  
(Seattle, Washington)



Lillian served as the Hydrographic Survey Intern at the NOAA Western Regional Center located in Seattle, Washington. Over the course of the summer, she supported the Pacific Hydrographic Branch (PHB) with collecting, reviewing and populating data from hydrographic surveys into the National Bathymetric Source (NBS). The survey will be used to re-scheme NOAA's nautical charts and curated into the NBS to be republished for public dissemination at NOAA's National Centers for Environmental Information (NCEI). Through sonar images taken in different areas of Puerto Rico and Long Island, NY of what the sea floor resembled, Lillian was able to analyze data from these hydrographic surveys and the bathymetric grid. In this role, Lillian gained new skills with data analysis programs such as CARIS HIPS, SIPS 10.4 and Pydro Explorer in order to successfully complete her projects. In addition, Lillian had the opportunity to assist facilitating activities at a 2-week summer camp for middle school students to explore NOAA, and learn more about the environment. She created interactive ways to teach the students about measuring the ocean's depth, navigation, and reading longitude and latitude by using a globe ball.





Maya Garrison  
Research Education Intern  
(Scituate, Massachusetts)



Maya assisted with leading education outreach efforts at Stellwagen Bank National Marine Sanctuary in Scituate, Massachusetts as the Research Education Intern. She led whale-based programming activities for a large Latin community in Lawrence, Massachusetts, where a majority of students come from Puerto Rico and Dominican Republic. The sanctuary sits off the coast of Massachusetts and is frequented by whales. These whales migrate to the Caribbean specifically to the Dominican Republic and Puerto Rico during the winter months. Maya had the opportunity to bridge the relationship between the whales at the sanctuary and the students' birth homes to open their minds to the fascination of humpback whale as well as the sister sanctuary located in Samana, DR, which host thousands of humpback whales during the winter mating season. She also taught the students about mapping, classification, and co-developed a bilingual humpback whale migration activity to further spread the awareness about the importance of protecting our natural environments. The work that Maya completed this summer was key in connecting underrepresented and underserved youth to the sanctuary, and informing the public about the importance of marine science.





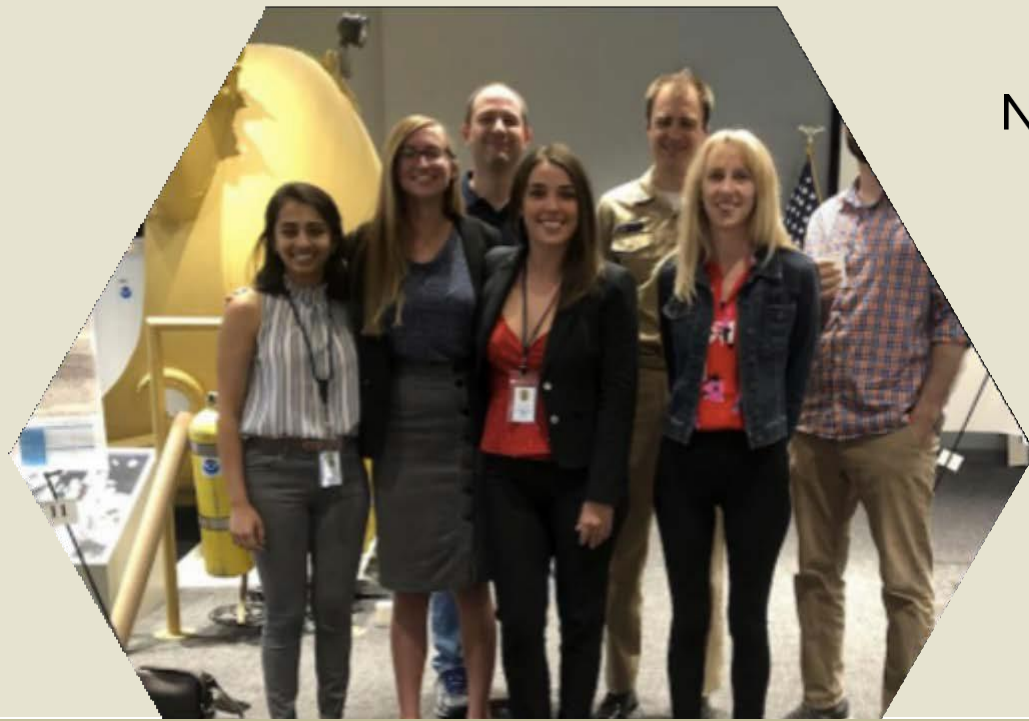
## Justin Pinero Community Outreach Intern (Alpena, Michigan)



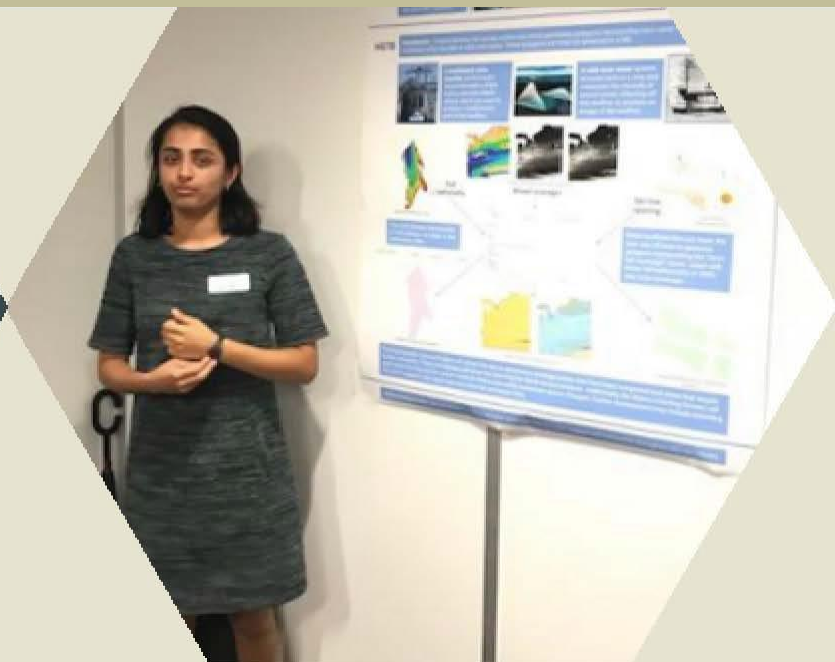
Justin worked as the Community Outreach Intern at Thunder Bay National Marine Sanctuary in Alpena, Michigan. The work that Justin completed over the summer was centered on community outreach and education with students and adults from local communities where assisted with facilitating activities at a summer camp program at the sanctuary. Within his first week, Justin got to lead a session about the plant-pollinator relationship with a group of 1st and 5th graders. He also ran a few docent programs for visitors in the museum and onboard the M/V Lady Michigan located on the shipwreck glass bottom boat tours. Justin shared maritime history along with answering any questions about Lake Huron, its history, and ecology. In addition, he facilitated programs on Science on a Sphere that addressed issues surrounding climate change and the rise of sea levels. When Justin was not leading programs, he would represent the sanctuary by participating at different events like Engineers Day where he shared information the sanctuary's resources. Through his efforts, Justin was able to connect the surrounding communities to the sanctuary and the various resources they offer to bring more awareness to the need to preserve our most pristine environments.



## Nidhi Mehta Navigation Services Intern (Silver Spring, MD)



Nidhi served as the Navigation Services Intern in NOAA's Office of Coast Survey at the Silver Spring Campus in Maryland. She supported the navigation response team (NRT) by designing a story map that will be on the Office of Coast Survey website in order for the public to learn about the 2019 NRT projects. Nidhi also developed a survey outline tool, which generates polygons from a multi-beam echo sounder and side scan sonar that calculates depth and measures intensity of the seafloor. As a Computer Science major, she was really excited work with the Hydrographic Survey Division that will utilize the tool to determine coverage areas that require further surveying. The Marine Chart Division will also apply data from this tool to update nautical charts and notify customers about changes. Although challenging with no previous background knowledge in oceanography or hydrography, she was able to obtain new skills in those area with analyzing data for nautical charts and maps. Her expertise was vital in creating tools to further support and elevate OCS and the Navigation Services Division.





# Conclusion

The 2019 Internships in Marine Geography Program successfully completed its second year and was able to recruit four talented young adults who worked across the country to complete high priority marine science-based projects. The completed projects ranged from whale-based educational outreach programs to developing a survey outline tool which generates polygons from acquired hydrographic data.

The interns gained personal and professional development skills and an increased awareness of environmental stewardship, sustainability and conservation. The program partners contributed innovative ideas that improved the program by providing additional training and job opportunities, mentorship, and a career workshop. The unique attributes of this program contributed to successfully achieving goals in diversity, inclusion and relevancy. We look forward to continuing to this successful internship initiative in the future.

