

GEORGES, Alexandre Erich Sébastien – Curriculum Vitae

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CURRENT OCCUPATION Ph.D. Candidate in Environmental Engineering at the **University of California, Berkeley**
Expected Graduation: **July 2025**

EDUCATION

University of California, Berkeley
Master of Science in Civil and Environmental Engineering
Area of Focus in Environmental Fluid Mechanics and Hydrology
GPA 3.558/4.0 Graduation Date: **December 2021**

New York City Department of Buildings
Summer Enrichment Program Certificate
Summer 2021

Stony Brook University, State University of New York
Bachelor of Engineering in Civil Engineering
Specialization in Water Resources and Environmental Engineering
GPA 3.58/4.0 **Cum Laude**, Graduation Date: **May 2020**

PUBLICATIONS

Georges, A¹., Stacey, M¹., Ramsewak D.², *"Spatio-Temporal Change in Mangrove Health and Storm Surge Attenuation in Grand-Pierre Bay, Haiti"*

- In Preparation.

¹ University of California, Berkeley, ² University of Trinidad and Tobago

PRESENTATIONS/CONFERENCE PARTICIPATION

Caribbean Studies Association (CSA) Conference 2024 – Saint Lucia

June 3-7, 2024

- Panel Presentation, "Constructing Just Futures: Navigating Climate Adaptation, Infrastructure, and Resource Stewardship in the Caribbean: *Mangrove Forests as Natural Coastal Defense in Haiti*"

Coastal Ocean Dynamics – Gordon Research Conference 2023 – Smithfield, Rhode Island

June 18-23, 2023

- Poster Presentation, "Remote Sensing Analysis of Mangrove Resilience and Cover Change in the Grand-Pierre Bay, Artibonite, Haiti"

RESEARCH EXPERIENCE

University of California, Berkeley

PhD Candidate/Graduate Student Researcher

Fall 2021 - Current

- Conducting research under Prof. Mark T. Stacey, within the Environmental Fluid Mechanics and Hydrology (EFMH) Group.
- Remote Sensing Analysis of mangrove forests in Haiti and the Caribbean.
- Hydrodynamic modeling of estuarine systems featuring mangrove forests.
- Hindcast ADCIRC modeling of hurricane-induced storm surges and their interactions with mangroves in the Gulf of Gonave, Haiti
- Remote Sensing and Hydrodynamic Modeling Assistance to the San Rafael, CA Sea-Level Rise Adaptation Study

Stony Brook University

Laboratory Assistant

October 2019 – March 2020

- Assisted Doctoral Candidate with experiments on Nitrogen removal from on-site Wastewater using Membrane Bioreactors.
- Extensive use of laboratory equipment, such as dissolved oxygen meters, spectrophotometers, and centrifuges, to conduct measurements of Nitrogen level and bacteria population.
- Contact angle measurements to evaluate the effectiveness of different membrane filters for MBR implementation.
- Environmental Engineering and Science Laboratory (EESL), Department of Civil Engineering at Stony Brook University.

TEACHING AND MENTORSHIP EXPERIENCE

University of California, Berkeley

Teaching Assistant

Spring 2024

- Assisting in teaching **Engineering Data Analysis (CE93)** in the Department of Civil and Environmental Engineering.
- Responsibilities include holding lab sections and office hours, proctoring exams, and assisting with course technologies.

Undergraduate Researcher Mentor

September 2022 - May 2023

- Served as a graduate mentor to a senior undergraduate student, assisting them with exploring and applying research ideas. Introduced mentee to remote sensing and geospatial data analysis tools, particularly the Planet SDK for satellite imagery.

Teaching Assistant

Fall 2022

- Assisting in teaching **Environmental Fluid Mechanics I (CE200A)** in the Department of Civil and Environmental Engineering.
- Responsibilities included teaching a discussion section, grading, holding office hours, managing the Canvas course page, and assisting with course technologies.

Reader/Teaching Assistant

Spring 2022

- Assisting in teaching **Environmental Fluid Mechanics II (CE200B)** in the Department of Civil and Environmental Engineering.
- Responsibilities included grading, holding office hours, managing the Canvas course page, and assisting with course technologies.

Reader (Grader)**Fall 2021**

- Graded for **Environmental Fluid Mechanics I (CE200A)** in the Department of Civil and Environmental Engineering.

AWARDS

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|--|------------------------------------|--------------------|
| • Outstanding Graduate Student Instructor Award | University of California, Berkeley | Spring 2023 |
| • Hearts to Humanity Scholarship | University of California, Berkeley | Spring 2022 |
| • The Robert and Phyllis Dean Fellowship | University of California, Berkeley | Fall 2021 |
| • National Grid GreenDependence Scholarship | Stony Brook University | Spring 2020 |

RELEVANT SKILLS**Programming Languages**

- Proficient in Python, MATLAB, and bash.
- Experienced in the Scientific Python ecosystem (numpy, scipy, pandas, matplotlib, seaborn).

Data Science and Remote Sensing

- Remote sensing data analysis using Python and QGIS.
- Remote sensing data access and acquisition with the Planet SDK and Google Earth Engine
- Supervised and Unsupervised Machine Learning with the scikit-learn framework.

Hydrodynamic Modeling

- Use of Delft3D FM and ADCIRC for modeling coastal and estuarine systems.

Languages

- Native French and Haitian Creole, Bilingual English. Limited Working Spanish.

OTHER EXPERIENCE AND ACTIVITIES**Founding Member of the Caribbean Coalition at Berkeley****UC Berkeley****August 2024**

- Student-led organization focused on creating an academic and cultural community for Caribbean(ist) scholars at UC Berkeley

Environmental Fluid Mechanics and Hydrology (EFMH) Group Coordinator**UC Berkeley****Fall 2022 – Spring 2024**

- Organized and coordinated research group meetings and presentations.

Civil Engineering Intern**Public Buildings and Housing Construction Unit (UCLBP), Haiti****Summer 2019**

- Assisted with inspecting public building construction sites, namely the new Haitian Parliament Palace construction site and new Department of Finance Headquarters, both part of the Port-au-Prince Administrative District project.

Volunteer Mentor**Education Haiti****Spring 2018 – Summer 2019**

- Advised high school students from Haiti in their applications to US and Canadian universities with the Education Haiti nonprofit organization.

REFERENCES**1. Mark T. Stacey**

Henry and Joyce Miedema Professor of Environmental Engineering

Email: mstacey@berkeley.edu

Professional Relationship: Doctoral Advisor

2. Fotini (Tina) Katopodes Chow

Fred and Claire Sauer Chancellor's Chair Professor in Environmental Engineering

Email: tinakc@berkeley.edu

Professional Relationship: Former Supervising Course Instructor / Doctoral Committee Member

3. Cynthia Gerlein-Safdi

Assistant Professor of Environmental Engineering

Email: cgerlein@berkeley.edu

Professional Relationship: Doctoral Committee Member