SHAMAN PATEL

PHD CANDIDATE

PROFESSIONAL SUMMARY

I am ecologist and evolutionary biologist interested in investigating the emergent patterns and component traits of ecosystems. My diverse experience allows me to apply my skills across various ecosystems and organisms. My goal is to continue to develop my toolset as a scientist and focus on projects that incorporate ecological theory, quantitative biology, and climate change. I'm interested in asking how ecosystem composition and function are expected to change due to anthropogenic impacts, and, where possible, finding solutions that promote conservation and sustainable use of natural resources. Education and outreach will also be a major component of my career and I am practicing science communication as I pursue my PhD.

EDUCATION

AUG 2023

PhD Environmental Science, Nanyang Technological University, Singapore

I have developed a project focused on the ecology of coral reefs to determine the contribution of corals to ecosystem services and understanding how these services might change as coral communities respond to climate change. This project is fieldwork intensive with reef sites across South and Southeast Asia. My regional approach allows for impactful inquiry on reef communities across a gradient of environmental conditions.

AUG 2020 - DEC 2022

Master of Science Marine Science, Nova Southeastern University, Florida

Awarded multiple grants (see award section below) to apply network analysis on coral-zooxanthellae system in the Caribbean to model community resilience and resistance to thermal stress. This project combined field work, computational biology, and molecular biology to answer critical questions about predictions for coral decline in the Western Atlantic.

AUG 2015 - MAY 2019

Bachelor's of Science: Ecology and Evolutionary Biology, Computational Biology, University of Rochester, New York

Graduated with honors in research with a minor in computational biology. Honors research involved applying for grants to cover costs of project and collecting baseline ecological data on marine invertebrates in rural Africa.

EMPLOYMENT HISTORY

JUL 2017 - PRESENT

Assistant Manager and Retail Associate, Pisces School of Dive, New York

- Oversee dive operations, retail, and course scheduling, ensuring smooth daily functions.
- Maintain employment by working when I visit during holidays.
- Coordinate schedules and manage retail inventory to enhance customer satisfaction.
- Support owners by handling managerial duties in their absence, ensuring continuity.

JAN 2023 - JUL 2023

Research Associate I, Nova Southeastern University, Florida

- Facilitated new lab setup, ensuring seamless integration of new faculty member.
- Assisted in writing research papers and lectures, accelerating faculty onboarding.
- Instructed graduate marine ecology and undergraduate marine biology courses.
- Enhanced course delivery through practical fieldwork, improving student engagement.
- · Contributed to research contract fulfillment, achieving project milestones efficiently.

MAR 2021 - JAN 2023

Administrative Assistant I, Nova Southeastern University, Florida

- Coordinated curriculum and scheduling for marine and environmental sciences, enhancing program efficiency.
- Organized events and managed general program design, improving departmental operations.
- Presented to secure funding and delivered guest lectures, increasing department visibility and support.

LINKS

<u>Personal Science</u> Communication Website

<u>LinkedIn</u> ORCID

SKILLS

Experimental Design

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Fieldwork

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Scientific Diving

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Molecular Biology

Lab Management

Computational Biology

Public Speaking

Scientific Writing

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Collaboration

Grant Writing

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Climate Change Adaptation

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Curriculum Design

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GIS

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Science Communication

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Lecture Development

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LANGUAGES

English

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Gujarati



JUL 2019 - APR 2020

Forestry and Natural Resources Technician at Naval Base Kitsap, NAVFAC NW, Washington

- Conducted forestry surveys and fire hazard assessments, ensuring compliance with environmental regulations.
- Monitored fisheries and protected habitats for endangered species, contributing to biodiversity conservation.
- Reviewed NEPA and environmental planning documents, ensuring lawful Navy operations.
- Performed forage fish surveys and salmon habitat monitoring, aiding in sustainable fisheries management.

NOV 2020 - MAR 2021

Part-time tutor, Huntington Learning Center, Florida

- Tutored students aged 6-18 in science, math, and English, improving academic performance.
- Prepared students for SAT/ACT and advanced placement exams.
- Developed customized lesson plans, addressing individual learning needs for students with different learning abilities.
- Collaborated with parents and teachers to track student progress.
- Enhanced critical thinking and problem-solving skills through targeted exercises.

AUG 2017 - MAY 2019

Technical Assistant I, Werren Lab, New York

- Maintained parasitoid wasp strains, ensuring optimal lab functionality and experiment accuracy.
- Trained new lab members, enhancing team efficiency and knowledge transfer.
- Conducted detailed experiments, contributing to significant research findings.
- Managed daily lab operations, ensuring a smooth workflow and adherence to protocols.

GRANTS AND AWARDS

SINGA

PHD AWARD

The Singapore International Graduate Award (SINGA) is a collaboration between the Agency for Science, Technology & Research (A*STAR) and Nanyang Technological University (NTU) to support distinguished international PhD Students in Singapore. Award comes with full tuition funding and monthly stipend for the four-year PhD programme.

NSU Fishing Tournament Research Grant

20,000 (USD)

Grant awarded to support Master thesis. Renewable for two years.

Small Research Grants

6,000 (USD)

Brian Keller Memorial, Marine Industries of South Florida, and Banks Family Endowment grants awarded to support Master's thesis.

Discovery Grant

2,000 (USD)

Grant awarded to support honors thesis during undergraduate studies for project on Nudibranch communities in Mozambique.

Presidential Merit Award

36,000 (USD)

Scholarship for exceptional application to the University of Rochester to cover tuition and board during undergraduate studies.

Spanish

Spanish

French

Spanish

French

R

Python

TEACHING AND GUEST LECTURES

Teaching Assistant (NTU)

UNDERGRADUATE: INTRO FIELD EXPERIENCE MARINE ECOLOGY

First year field course for undergraduate students. Duties included diving to survey setup, ecological sampling technique instructions, general chaperoning and ensuring student safety while snorkeling, and providing guidance on experimental design for student projects in field.

Teaching Assistant (NSU)

GRADUATE: MARINE ECOLOGY

Assisted with curriculum design, grading, and instruction for new faculty teaching marine ecology course.

Teaching Assistant (NSU)

UNDERGRADUATE: MARINE BIOLOGY FIELD/LAB

Assisted with curriculum design, grading, and instruction for new faculty teaching marine biology combined field and lab course.

Teaching Assistant (UofR)

UNDERGRADUATE: ECO AND EVO BIOLOGY LAB

Taught ecological sampling techniques, experimental design, and analysis to final year ecology students.

Lecture: Climate change and ecosystem stability – what it means for the future of coastal areas

NSU MARINE ECOLOGY GRADUATE COURSE

Lecture: The importance of creativity in science

NSU UNDERGRADUATE IMMERSION PROGRAM

Lecture: Ecological Resistance of Caribbean Coral Network to Thermal Stress

NSU VIRTUAL SEMINAR SERIES

Lecture: Diving in academia and the private sector

FINGER LAKES COMMUNITY COLLEGE SCUBA PROGRAM