Lawrence Angelo Hortinela Balitaan

Email: lhbalitaan@gmail.com Website: https://lhbalitaan.github.io/ he, him, his

Education

Aug 2020 BS in Oceanic and Atmospheric Sciences, University of California, San Diego (UCSD)

GPA: 3.54

May 2018 | Physics for Transfer, Santa Barbara City College (SBCC)

Work Experience

Nov 2020 -Present

Research Data Analyst I | Scripps Oceanography | La Jolla, CA

- Write, run, review, edit, and verify automated detection and classification software for toothed whale echolocation clicks and baleen whale calls using MATLAB
- Scan through, annotate, analyze, and interpret active and passive acoustic recording data for baleen whale calls, toothed whale echolocation clicks, and anthropogenic sounds using MATLAB
- Write reports including charts, tables, plots, and other visual aids to document project steps and progress and assist with manuscript preparation
- Advisors: Simone Baumann-Pickering, John Hildebrand

June 2019 -Sept 2019

Undergraduate Research Intern | California Current Ecosystem Long Term Ecological Research (CCE LTER) | La Jolla, CA

- Researched how the spatiotemporal redirection of mesoscale eddies driven by El Niño affect plankton distribution in the California Current System
- Used MATLAB to test ROMS-NEMURO, a coupled physical-biogeochemical ocean model
- Created composite time series and correlation plots of 11 physical, biological, and chemical variables during El Niño, normal, and La Niña conditions
- Characterized significant trends after analyzing the relationships between variables
- Advisors: Art Miller, Nathali Cordero-Quirós

Manuscript In Progress

Cordero-Quirós, N., Miller, A. J., Pan, Y., Balitaan, L., Dussin, R., and Curchitser, E. (2021). Physical-ecological response of the California Current System to ENSO events in ROMS-NEMURO. Ocean Dynamics, sub judice.

Presentation

Sept 2019 | CCE LTER Presentation | La Jolla, CA

• Presented my research results of the multiannual effects of El Niño on plankton in the California Current Ecosystem using a physical-biogeochemical model to experts in plankton ecology, chemical oceanography, and climate science

Outreach

Apr 2017, 2018

Science Discovery Night | Citrus Glen Elementary School | Ventura, CA

- Educated students and their families by performing physics experiments related to electricity and magnetism, optics, acoustics, and thermodynamics with Physics Club (2018)
- Educated students and their families on zoology by engaging them with interactive live and taxidermic animals with Biology Club (2017)

Apr 2017, 2018

Science Night | Harding Elementary | Santa Barbara, CA

- Educated students and their families by performing physics experiments related to electricity and magnetism, optics, acoustics, and thermodynamics with Physics Club (2018)
- Educated students and their families on zoology by engaging them with interactive live and taxidermic animals with Biology Club (2017)

Mar 2017, Apr 2018

Noche de Ciencias | Casa de la Raza | Santa Barbara, CA

- Educated students with underprivileged and underrepresented backgrounds and their families by performing a wide range of physics experiments to promote awareness on their ability to pursue careers in physics and engineering with Physics Club (2018)
- Educated students with underprivileged and underrepresented backgrounds and their families by engaging them with interactive live and taxidermic animals to promote awareness on their ability to pursue careers in STEM with Biology Club (2017)

Mar 2017, 2018

Science Discovery Day | SBCC | Santa Barbara, CA

- Educated the public by performing electricity and magnetism physics experiments with Physics Club (2018)
- Increased climate change awareness and educated the public on ocean science with Geology Club (2018)
- Educated students and their families on zoology by engaging them with interactive live and taxidermic animals with Biology Club (2017)

Mar 2017, 2018

Science Night | Monroe Elementary | Santa Barbara, CA

- Educated students and their families by performing physics experiments related to electricity and magnetism, optics, acoustics, and thermodynamics with Physics Club (2018)
- Educated students and their families on zoology by engaging them with interactive live and taxidermic animals with Biology Club (2017)

FEB 2017, 2018 | Science Night | Adams Elementary | Santa Barbara, CA

- Educated students and their families by performing physics experiments related to electricity and magnetism, optics, acoustics, and thermodynamics with Physics Club (2018)
- Educated students and their families on zoology by engaging them with interactive live and taxidermic animals with Biology Club (2017)

Leadership

Aug 2017 – May 2018

Vice President of Physics Club | SBCC | Santa Barbara, CA

- Led outreach programs to increase physics awareness to children
- Strengthened a joint program between University of California, Santa Barbara Physics Club and SBCC Physics Club which helps SBCC STEM students ease the transfer process through networking and academic advising
- Coordinated events with various on-campus science and diversity clubs to expand Physics Club's influence
- Planned workshops to provide members the ability to design experiments to practice the scientific method
- Created interactive how-to videos of physics experiments to improve member retention

Honors

2018 – 2020 | Provost Honors | UCSD 2015 – 2018 | SBCC Honors Program 2015 | President's Honor Roll | SBCC

Computational skills

PROGRAMMING MATLAB
LANGUAGES
TOOLS AND GitHub, LaTeX
SOFTWARE

References

Dr. Simone Baumann-Pickering:

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Dr. John Hildebrand:

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Distinguished Professor of Oceanography Scripps Institution of Oceanography 9500 Gilman Drive #0205 La Jolla, CA 92093 (858) 534–6849

Dr. Art Miller:

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