

Jorge Arroyo-Esquivel

PERSONAL DATA

PERSONAL WEBSITE: <https://jarroyoe.github.io/>
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RESEARCH INTERESTS

- Analysis of conservation strategies in marine ecosystems using spatiotemporal modelling.
- Use of mathematical modelling to improve forecasting in ecology.

EDUCATION

SEPTEMBER 2018-CURRENT	University of California, Davis Doctor of Philosophy Major: Applied Mathematics Advisor: Alan Hastings Expected graduation: June 2023
MARCH 2013-DECEMBER 2017	Universidad de Costa Rica Bachelor of Science with Honorific Graduation Major: Mathematics

WORK EXPERIENCE

SEPTEMBER 2018-CURRENT	University of California Davis Teaching Assistant
AUGUST 2019-SEPTEMBER 2019	University of California Davis Associate Instructor
JANUARY 2018-AUGUST 2018	Western Union Sr. Spec/Analyst Rep & Analysis
APRIL 2014-DECEMBER 2017	Universidad de Costa Rica Research Assistant

PUBLICATIONS

- Sanchez F, **Arroyo-Esquivel J**, Vasquez P. Hospitalization in the transmission of dengue dynamics: The impact on public health policies. *Under review* ([arXiv](#)).
- **Arroyo-Esquivel J**, Sanchez F, Barboza L. Infection model for analyzing biological control of coffee rust using bacterial anti-fungal compounds. *Mathematical BioSciences*, 307, 13-24. ([doi](#)) ([arXiv](#))

CONFERENCE TALKS

2018	21 st International Symposium on Mathematical Methods Applied to Sciences Universidad de Costa Rica, San Jose, Costa Rica.
2017	19 th Fall School of Mathematical Biology Universidad de Colima, Colima, Mexico.

PROFESSIONAL SERVICE

Mentoring in: Project SHORT.
Equity in Science, Technology, Engineering, Math, and Entrepreneurship.
Association for Women in Science, Sacramento Chapter.
Reviewer in: International Journal of Biometeorology.

LANGUAGES

SPANISH: Native
ENGLISH: Fluent
JAPANESE: Basic Knowledge
FRENCH: Basic Knowledge

COMPUTER SKILLS

PROGRAMMING LANGUAGES: R, Matlab, SQL, Git, C# LaTeX
BUSINESS INTELLIGENCE: Microsoft Office, Alteryx, Tableau