

# Jorge Arroyo-Esquivel

## PERSONAL DATA

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PERSONAL WEBSITE: <https://jarroyoe.github.io/>  
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OFFICE: University of California, Davis. Mathematical Sciences Building 2229  
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## RESEARCH INTERESTS

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

## EDUCATION

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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

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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

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- 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

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

## PROFESSIONAL SERVICE

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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

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

## COMPUTER SKILLS

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