TAINÁ ROCHA

I am a researcher working on patterns of biodiversity distribution, focusing on the impacts of global change (climate change and land-use and land-cover change). My recent interests and work including: 1. Analysis of climate data and land use and land cover data under different scenarios of climate change, 2. Spatial analysis of species diversity (alpha and beta diversity), 3. Ecological niche models/species distribution models and other niche analyses to assess the impacts of global change on biodiversity, 4. Biogeographic patterns and evolutionary history in the Neotropics.

Note: I use open-source tools and platforms. I am interested in good practices about open science (open databases, open software, etc.), good workflows, reproducibility and FAIR principles.





▲ Download this resume in PDF.

CONTACT

- ☑ taina013@gmail.com
- **G** Github
- **ORCID**
- Lattes
- Researchgate
- in Linkedin
- ₩ Website
- **Y** Twitter

2020

Open Life Science program

OLS-2. Training for early stage researchers and young leaders interested in furthering their Open Science skills.

Online

2020

Writing academic manuscripts using rmarkdown

This training provided the different steps and tools for writing academic manuscripts or technical reports in an automated and reproducible way using R and rmarkdown.

Online



RESEARCH EXPERIENCE

2021 2021

Independent research

Home Office

O Home Office

· Forest under different scenarios of climate change Thttps://github.com/Tai-Rocha/Forest_Scenarios.github.io

2021 2019 Postdoctoral Researcher

Terrestrial Ecosystem Modeling Supervisor: Marinez F Siqueira

QJBRJ. Brazil

- · Beta diversity in Caatinga dry tropical forest
- Tai-Rocha/Caatinga_Dry_Forest.github.io
- · Climatic niche analysis for Syzygiella rubricaulis (Bryophytes) https://github.com/Tai-Rocha/S_rubricaulis_bryophytes
- The first botanical explorations of bryophyte diversity in the Brazilian Amazon mountains: high species diversity, low endemism, and low similarity
- Tai-Rocha/Bryophyte-Amazon-mountains
- · Ecological niche models with future projections for Dimorphandra wilsonii Rizzini (Fabaceae) presented to Green List in the three-year activity plan of the Brazilian Plant Red List Authority member of the Plant Conservation Committee between 2017-2020 and the Species Survival Commission of the International Union for Conservation of Nature (IUCN)
- https://github.com/Tai-Rocha/faveiro
- · Ferns and lycophytes diversity of Tijuca forest.
- https://github.com/Tai-Rocha/Ferns-and-lycophytes

Researcher of Technological Development and Innovation

Supervisor: Mariana M Vale

- · Global land-use and land-cover (LULC) data under historical, current, and future climatic conditions
- https://github.com/Tai-Rocha/LUH2_Data
- · Ecological niche models (ENMs) for Carpornis melanocephala (Passeriformes: Cotingidae) in Rio de Janeiro State, Brazil
- https://github.com/Tai-Rocha/Carpornis_melanocephala
- · Ecological niche modeling and niche similarity test to compares two divergent lineages of *Microtus californicus* (Rodentia, Cricetidae) nttps://github.com/Tai-Rocha/Vole

SKILLS

₽ R

Git وا

GitHub

M Markdown

LATEX

∆ Linux OS

☐ Virtual Machines





2019 2017

♣☐ TEACHING EXPERIENCE 2020 Instructor PUC-Rio, Brazil Biology department 2019 · Ecological Niche Models and Species Distribution Models, theory and · Public tools for spatial analysis of biodiversity **Guest Lecture** 2020 II National Meeting on Biological Collections and their Interfaces 2020 **♀** IVB. Brazil · Ecological niche models and biological conservation in future scenarios of global changes Guest lecture. 2019 **Q** UVA, Brazil Biological Sciences-Bachelor's Degree 2018 · Ecological niche models under a biogeography perspective · Ecological Niche Models and Species Distribution Models 2018 Guest lecture **Q** UFRA, Brazil Biological Sciences-Bachelor's Degree 2017 · Introduction to Geographic Information System (GIS) · Data for ecological niche models Guest lecture 2017 **Q** UNESA, Brazil Biological Sciences Undergraduate 2017 · Introduction to databases which provide input to perform ecological niche models High school teacher 2017 **♀** Rio de Janeiro, Brazil Dinâmica Natural 2015 · Science classes **SELECTED PUBLICATIONS** Global land-use and land-cover data: historical, current and 2021 future scenarios 2021 Accepted for publication in Biodiversity Informatics Journal, available in bioRxiv · Authored by Vale MM. Lima-Ribeiro MS and Rocha TC. The first botanical explorations of bryophyte diversity in the 2020 Brazilian Amazon mountains: high species diversity, low 2020

endemism, and low similarity Biodiversity and conservation

· Authored by Costa D, Nada F.and Rocha TC.

2019 2019 A dynamic continental moisture gradient drove Amazonian bird diversification

Science Advances

· Authored by Silva SM, Townsend P, Carneiro L, Burlamagui TCT, Ribas CC, Sousa-Neves T, Miranda LS, Fernandes AM, d'Horta FM, Araújo-Silva LC, Batista R, Bandeira CHMM, Dantas SM, Ferreira M, Martins DM, Oliveira J, Rocha TC, Sardelli CH, Gregory T, Rêgo PS, Santos MP, Sequeira F, Vallinoto M and Aleixo A.

2019 2019 A macroecological approach to evolutionary rescue and adaptation to climate change

Ecography

· Authored by Diniz-Filho JAF, Souza KS, Bini LM, Loyola R, Dobrovolski R, Rodrigues JFM. Lima-Ribeiro Matheus MS. Terribile CL. RangelTF. Bione I, Freitas R, Machado IF, Rocha TC, Lorini ML, ValeMM, Navas CA, Maciel NM, Villalobos F, Olalla-Tarraga MA, Gouveia S.

2015 2015 Molecular phylogeny and diversification of a widespread Neotropical rainforest bird group: The Buff-throated Woodcreeper complex, Xiphorhynchus guttatus/susurrans (Aves: Dendrocolaptidae)

Molecular Phylogenetics and Evolution

· Authored by Rocha TC, Sequeira F, Aleixo A, Rego PS, Sampaio I, Schneider H, Vallinoto M.

2014 2014 Instabilidade Climática e diversidade de espécies na Amazônia In book: Cenários para Amazônia: clima, biodiversidade e uso da

· Authored by Aleixo A, Townsend P, Araújo-Silva LC, Miléo CHM, Batista R, Burlamagui TCT, Danta SM, Fernandes AM, Ferreira M, Martins DM, Rêgo PS, Ribas CC, Rocha TC, Santos MP, Sardelli CH, Sequeira F, Soares LMS, de Sousa BRS, Sousa SA, Sousa-Neves T, Gregory T, Vallinoto M.

2009 2009 Identification and phylogenetic inferences on stocks of sharks affected by the fishing industry off the Northern coast of Brazil

Genetics and Molecular Biology

· Authored by Rodrigues-Filho LF, Rocha TC, Rego PS, Schneider H, Sampaio I, Vallinoto M.



MEMBER OF EXAMINATION COMMITTEE

2021

Leave out or put in - selecting input data to improve ecological niche models applied to conservation and climate change analysis: an approach using the Atlantic Goliath Grouper, Epinephelus itajara (Perciformes)

Final Master committee. Student: Eduardo Motta Carelli Minsky. Advisor: Maria Lucia Lorini. Institution: UNIRIO

Q UNIRIO, Brazil

Wallacean knowledge shortfall of mammals in the Central 2021 Corridor of the Atlantic Forest Final undergraduate committee. Student: Inês Motta Comarella. Advisor: Francisco Candido Cardoso Barreto. Institution: UFES **Q** UFES. Brazil Impacts on the food behavior of birds in the urban, semi-urban 2021 and rural environment in the municipal of Capanema, Pará Final undergraduate committee. Student: Luana Gabriela Costa Bezerra, Advisor: Breno Barros, Institution: UFRA **Q** UFRA. Brazil Modeling species dis-tribution of plant species as tool for 2021 assessing the impacts of climate changes and progress of Sustainable Development Goals (SDGs) 13 and 15 in Caatinga Master's qualifying examination. Student: Lucas Peixoto Teixeira. Advisor: Marcelo Freire Moro. Institution: UFC **Q** UFC. Brazil Strategies for conservation of endemic and threatened species: 2020 Hindsia glabra K.Schum E Aosa uleana (Urb.Gilg) Weigend Master's project monitoring committee. Student: Bárbara Piovani Luz Aieta Afonso. Supervisor: Marinez Ferreira de Siqueira. Institution: ENBT/JBRJ **♀** ENBT. Brazil Seabird habitat use and its association offoraging with Guiana 2018 dolphin (Sotalia guianensis) in Sepetiba Bay (2018). **Undergraduate monitoring committee**. Student:Leonardo Gomes Pacheco de Sá. Advisor: Maria Alice dos Santos Alves. Co-advisor: Rodrigo Hipolito Tardin Oliveira. Institution: UFRJ O UFRJ. Brazil SELECTED TALKS & SCIENTIFIC COMMUNICATION Global land-use and land-cover data: historical, current and 2020 future scenarios Online Final presentation in OLS-2|Slides

I recently created a website.⁷ where I will talk about science communication, provide tutorials, other diverse themes about science career

SELECTED EVENTS

RNP 2019 | Slides

2019

V International Seminar on Statistics with R

Communication Technologies in Brazil

V SER event was recognized by the R Foundation (2018) for its pioneering in Latin America in bringing together an expressive number of R users Participation as a listener.

Connecting data and experiences: Biodiversity, Information and

Online

Pasília, Brazil

Forum of Rede Nacional de Ensino e Pesquisa

RNP 2019. Challenges of digital transformation in teaching and research will lead debates at 2019 RNP Forum | Participation as Guest speaker.

Pasília, Brazil

LIST OF ABBREVIATIONS

ENBT

Escola Nacional de Botânica Tropical

🗣 Rio de Janeiro, Brazil

• IECOS

Instituto de Estudos Costeiros

♥ Bragança-Pará, Brazil

• IVB

Instituto Vital Brazil

Niterói-Rio de Janeiro, Brazil

• JBRJ

Instituto de Pesquisas Jardim Botânico do Rio de Janeiro

♀ Rio de Janeiro, Brazil

MPFG

Museu Parense Emílio Goeldi

Pará, Brazil

• OLS

Open Life Science

Q Global

PUC-Rio

Pontifícia Universidade Católica do Rio de Janeiro

• Rio de Janeiro. Brazil

■ RNP

Rede Nacional de Ensino e Pesquisa

Brazil

• UFC

Universidade Federal do Ceará

♀ Ceará, Brasil

UFES

Universidade Federal do Espírito Santo

Sepírito Santo, Brasil

UFPA

Universidade Federal do Pará

Pará, Brasil

• UFRA

Universidade Federal Rural da Amazônia

Pará, Brasil

UFRJ

Universidade Federal do Rio de Janeiro

♀ Rio de Janeiro, Brazil

UNESA

Universidade Estácio de Sá

♀ Rio de Janeiro, Brazil

UNIRIO

Universidade Federal do Estado do Rio de Janeiro

♀ Rio de Janeiro, Brazil

UVA

Universidade Veiga de Almeida

• Rio de Janeiro, Brazil

This resume was made with the R packages **pagedown** and **datadrivency**.

Code available on **G** GitHub.

Last updated on 2021-07-27. The most recent version of this resume is available here.