# TAINÁ ROCHA

Sou pesquisadora dos padrões de distribuição da biodiversidade, com enfoque nos impactos de mudanças globais (mudanças climáticas e de uso e cobertura do solo). Meus interesses e trabalhos recentes são: 1. Análises de dados climáticos e dados de uso e cobertura do solo em diferentes cenários de mudanças climáticas, 2. Análises espaciais da diversidade de espécies (diversidade alfa e beta), 3. Modelos de nicho ecológico / modelos de distribuição de espécies e outras análises de nicho para avaliar os impactos das mudanças globais na biodiversidade, 4. Padrões biogeográficos e história evolutiva nos neotrópicos. Uso ferramentas, bases dados e plataformas de código aberto. Tenho interesse em boas práticas da ciência aberta, bons fluxos de trabalho e reprodutibilidade. Tenho interesse em boas práticas da ciência aberta, bons fluxos de trabalho, reprodutibilidade e princípior FAIR.



Museu Paraense Emílio Goeldi

PA- Brasil

Mestrado em biologia ambiental

PA- Brasil

### EDUCAÇÃO COMPLEMENTAR

Flexdashboard: Painéis interativos utilizando R

Analisar, Compartilhar, Reproduzir, Seus dados contam uma história. Conte com R Markdown & Flexdashboard. Transforme suas análises em documentos, relatórios, apresentações e painéis de alta qualidade.

Online

Manejo de tablas con {dplyr} 2021

2021

Repasaremos las principales funciones de dplyr y utilizaremos inner\_join, left\_join, full-join y otros más para el manejo de tablas.

Online

Expresiones regulares para la limpieza y transformación de datos

Este taller tiene por objetivo que sus participantes se familiaricen con el uso de expresiones regulares (conocidas también como "regex"). Específicamente, abordaremos el potencial que tienen como parte del proceso de limpieza y transformación de datos usando paquetes del Tidyverse.

Online

Open Life Science program 2020

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

Online



Link para download em PDF.

#### CONTATO

☑ taina013@gmail.com

**G** Github

(D) ORCID

Researchgate

in Linkedin

**W**ebsite

**₩** Twitter

### COMPETÊNCIAS

**₽**R

Git وا

GitHub

Mt Markdown

**L**AT<sub>E</sub>X

∆ Linux OS

☐ Máquinas virtuais





Escrevendo manuscritos acadêmicos usando RMarkdown

Esta oficina vai mostrar os diferentes passos e ferramentas para escrever manuscritos acadêmicos ou relatórios técnicos de forma automatizada e reprodutível usando R e rmarkdown.

**O**nline

## 📮 EXPERIÊNCIA PROFISSIONAL | PESQUISA

2021

Floresta nos diferentes cenários de "caminhos socioeconômicos compartilhados" (SSPs) - Pesquisa independente

• Avaliação quantitativa da categoria de florestas da base de dados GCAM-Demeter, que atualmente disponibiliza dados globais de uso e cobertura do solo com a maior resolução espacial para projeções futuras (2015 a 2100)

• Home officie

2019 | 2021 Pequisadora de pós-doutorado|Supervisão: Marinez F.Siqueira

- O Diversidade na composição de espécies (beta diversidade) na Caatinga de cristalino
- Variação climática na distribuição de Syzygiella rubricaulis (Briófitas)
- 🜎 Primeiro estudo de diversidade de briófitas das montanhas da Amazônia brasileira
- Modelos de nicho ecológico e de distribuição da espécies Dimorphandra wilsonii(Fabaceae) apresentado no plano de atividades trianuais do Brazilian Plant Red List Authority membro do Plant Conservation Commitee entre 2017-2020 e do Species Survival Comission da International Union for Conservation of Nature (IUCN)
- Diversidade de samambaias e licófitas da Floresta da Tijuca

♥JBRJ, Brasil

2017 | 2019

- Pequisadora de desenvolvimento tecnólogico e inovação | Supervisão: Mariana M. Vale
- © Global land-use and land-cover data for ecologists: historical, current and future scenarios
- Modelos de nicho para espécie Carpornis melanocephala (Passeriformes: Cotingidae) no estado do Rio de Janeiro State, Brazil
- Modelos de nicho para espécie Carpornis melanocephala (Passeriformes: Cotingidae) no estado do Rio de Janeiro State, Brazil
- © Biogeografia e história evolutiva nos neotrópicos: conexões entre Amazônia e Mata Atlântica ao longo do tempo usando modelos de nicho de aves com distribuição disjunta para testar hipóteses dos possíveis caminhos de conexões

### **₽** TEACHING EXPERIENCE

**UFRA** 

· TA and lectured

networks

2018

2020 Instructor PUC Rio de Janeiro, Brazil Biology department 2020 · Served as TA for two day workshop on how to leverage Javascript in Shiny applications · Lectured on using R2D3 package to build interactive visualizations.<sup>1</sup> Instructor 2019 PUC Rio de Janeiro, Brazil Biology department 2019 · Served as TA for two day workshop on how to leverage Javascript in Shiny applications · Lectured on using R2D3 package to build interactive visualizations.<sup>2</sup> 2019 Guest lecture. Biological Sciences- Bachelor's Degree RJ, Brazil Veiga de Almeida University 2019 · Served as TA for two day workshop on how to leverage Javascript in Shiny applications · Lectured on using R2D3 package to build interactive visualizations.<sup>3</sup> Data Visualization Best Practices 2019 RJ, Brazil DataCamp 2019 · Designed from bottom up course to teach best practices for scientific visualizations. · Uses R and ggplot2. · In top 10% on platform by popularity. Improving your visualization in Python 2019 RJ. Brazil DataCamp 2019 · Designed from bottom up course to teach advanced methods for enhancing visualization. · Uses python, matplotlib, and seaborn. Guest lecture. Biological Sciences- Bachelor's Degree 2018 RJ, Brazil Veiga de Almeida University 2018 · Served as TA for two day workshop on how to leverage Javascript in Shiny applications Lectured on using R2D3 package to build interactive visualizations.<sup>4</sup> 2018 Guest lecture. Biological Sciences-Bachelor's Degree

 $\cdot$  Topics covered from penalized regression to boosted trees and neural

· Highest level course offered in department

I am passionate about education. I believe that no topic is too complex if the teacher is empathetic and willing to think about new methods of approaching task.

• PA. Brazil

Guest lecture. Biological Sciences Undergraduate 2017 RJ, Brazil Estácio de Sá University 2017 · TA and lectured · Covered introduction to R language for statistics applications · Graduate level class 2017 Guest lecture. Biological Sciences-Bachelor's Degree PA. Brazil **UFRA** 2017 · TA and lectured · Topics covered from penalized regression to boosted trees and neural networks · Highest level course offered in department High school teacher 2017 Q RJ. Brazil Dinâmica Natural 2015 · TA and lectured · Covered modern statistical computing algorithms · 4th year PhD level class **SELECTED PUBLICATIONS** Global land-use and land-cover data: historical, current and 2021 future scenarios 2021 Under-Review, 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.

A dynamic continental moisture gradient drove Amazonian bird diversification

#### Science Advances

2019

2019

· Authored by Silva SM, Townsend P, Carneiro L, Burlamaqui 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.
- · Successfully met qualifying examination standards

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 terra

· 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

Wallacean knowledge shortfall of mammals in the Central Corridor of the Atlantic Forest

Final undergraduate committee. Student: Inês Motta Comarella. Advisor: Francisco Candido Cardoso Barreto. Institution: UFES

SES. Brazil

2021

Impacts on the food behavior of birds in the urban, semi-urban and rural environment in the municipal of Capanema, Pará

Final undergraduate committee. Student: Luana Gabriela Costa Bezerra, Advisor: Breno Barros, Institution: UFRA

• PA. Brazil

2021

Modeling species dis-tribution of plant species as tool for 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

• CE. Brazil

2020

Strategies for conservation of endemic and threatened species: 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 Sigueira. Institution: ENBT/JBRJ

RJ. Brazil

2018

Seabird habitat use and its association offoraging with Guiana 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

RJ, Brazil

### SELECTED TALKS & SCIENTIFIC COMMUNICATION

2020

Global land-use and land-cover data: historical, current and future scenarios

Final presentation in OLS-2|Slides

Online



### SELECTED EVENTS

2021

V International Seminar on Statistics with R

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.

Online

2019

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.

OF. Brazil

I regularly blog about data science and visualization on my blog LiveFreeOrDichotomize.5

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

Code available on 🖸 GitHub.

Last updated on 2021-07-20. The most recent version of this resume is available here.