



# RAFAEL GOMES DE MENEZES

OCEANOGRAPHER

## PERSONAL INFORMATION

Brazilian / Italian

Lecce, Italy

rafagmenezes@gmail.com  
rafael.menezes@cmcc.it

[linkedin.com/in/rafael-gomes-de-menezes/](https://www.linkedin.com/in/rafael-gomes-de-menezes/)

## LANGUAGES

Portuguese ●●●●●●●●  
English ●●●●●●●●  
Italian ●●●●●●●●  
Spanish ●●●●●●●●

## TOOLS

Python ●●●●●●●●  
Matlab ●●●●●●●●  
R ●●●●●●●●  
Bash ●●●●●●●●  
NodeJS ●●●●●●●●

Linux  
 Mac  
 Windows  
 Microsoft Office

## SUMMARY

A versatile professional with strong technical and soft skills, adept at effective communication, collaborative teamwork and rapid learning. Currently contributing as a Research Assistant collaborator at CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici).

Previous experience with coastal monitoring programs, underwater acoustics and oceanographic data quality analysis in Brazil.

Further experience in public awareness and environmental education projects.

Enthusiastic of multidisplinary approach on developing, enhancing and automating data analysis and graphical visualizations, with a focus on utilizing technology for positive environmental impact ('Tech for Good').

## EDUCATION

**MSC. MARINE BIOTECHNOLOGY - IEAPM/UFF**  
2017 - 2019 / Arraial do Cabo, RJ, Brazil

- International Long Term Ecological Research (ILTER) site project
  - Cabo Frio Upwelling System Structuring Process
  - Marine Protected Area Environmental Management councils and planning
- Thesis: Data Science applied to marine conservation and bioprospection: Synthesis of SISBIO databases pertaining to Arraial do Cabo (RJ) and Fernando de Noronha (PE), Brazil
  - Development of a PYTHON prototype app for marine conservation managers

**BSC. OCEANOGRAPHY - USP**

2010 - 2015 / São Paulo, SP, Brazil

- Sandwich Scholarship in University of New South Wales (UNSW), Sydney, NSW, Australia - 2013
  - MATLAB and imaging analysis for scientific goals
- Thesis: Environmental evolution of the Caravelas estuary (BA) in the last century, based on multi-indicator analyzes

## COMPLEMENTARY FORMATION

**Jun, 2019 / Diving Training Center, Cabo Frio, RJ, Brazil**

- Stress and Rescue Diving course - Scuba Schools International (SSI)

**Jun, 2018 / University of São Paulo, SP, Brazil**

- Short course - São Paulo School of Advanced Science (SPSAS) on Ocean Interdisciplinary Research and Governance

**Nov, 2017 / Universiti Malaysia Terengganu, Terengganu, Malaysia - OTGA (IODE/ IOC/ UNESCO)**

- Short course - Integrated Data Analysis for Upwelling Studies

## EXPERIENCES

### DATA SCIENTIST / JUNIOR RESEARCHER

**Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC) -**

<https://www.cmcc.it/>

2023 - present / Lecce, LE, Italy

- Oceanographic data analysis with PYTHON
  - Physical and biogeochemical data from remote sensing, models and reanalysis products
  - Statistical analysis, data visualization and scientific writing
- Scientific advisor for the development of a platform to support MPA's management

### FELLOW RESEARCHER

**Paulo Moreira Admiral Marine Studies Institute (IEAPM) - Brazilian Navy**

2022 - 2023 / Arraial do Cabo, RJ, Brazil

- Collaboration in projects of military, civilian and academic interests
- Oceanographic data analysis and management team member
  - Objective Analysis with FORTRAN, MATLAB and PYTHON
- Underwater acoustic data analysis and sound propagation modelling system development team member, using PYTHON, FORTRAN, NODEJS and HTML

### AUTONOMOUS CONSULTANT

**Ecowaves Tecnologia e Serviços Ltda.**

2019 - 2023 / remote

- Underwater acoustic data analyst of coastal works noise monitoring programs
  - Processing, analysis and visualization with PYTHON
  - Results are used by clients to attend environmental licensing obligations

**Biosustente Estudos Ambientais Ltda. - <https://www.biosustente.com.br/>**

2015 - present / remote

- Environmental Impact Assessments
  - EIA / RIMA
  - Monitoring projects and Environmental Management Plans

### TECHNICAL ANALYST

**Cepemar Serviços de Consultoria em Meio Ambiente Ltda.**

<https://www.cepemar.com.br/>

2022 - 2023 / remote

- Meteorological Data Qualification of OCEANOP/Petrobrás project team member
  - Wind, Air Pressure, Temperature and Humidity, and Ocean Waves and Currents data
  - Development and evaluation of PYTHON scripts

### EDUCATOR

**Clube do Cientista (Scientist Club) - <https://www.clubedocientista.com/>**

2019 - 2022 / remote

- Professor in online PYTHON introductory courses for academic/scientific public
- Development of educational methodologies

### TECHNICIAN

**Paulo Moreira Admiral Marine Studies Institute (IEAPM) - Brazilian Navy**

2016 - 2019 / Arraial do Cabo, RJ, Brazil

- DTI-B Fellowship from Pro-Ocean National Institute of Science and Technology (INCT)
  - Multiple dataloggers sea temperature monitoring program with scientific diving
  - Data management with PYTHON
- Project's interlocutor with local Marine Protected Area

# PRODUCTIONS

## PERIODIC ARTICLES:

- **COMPLEXITY-FUNCTIONING RELATIONSHIPS DIFFER ACROSS DIFFERENT ENVIRONMENTAL CONDITIONS.** MAYER-PINTO M., CALEY A., KNIGHTS A.M., AIROLDI L., BISHOP M.J., BROOKS P., COUTINHO R., CROWE T., MANCUSO P., NAVAL-XAVIER L.P.D., FIRTH L.B., **MENEZES R.**, MESSANO L.V.R., MORRIS R., ROSS D.J., WONG J.X.W., STEINBERG P., STRAIN E.M.A. JOURNAL OF ENVIRONMENTAL MANAGEMENT, V.354, ISSN 0301-4797, [HTTPS://DOI.ORG/10.1016/J.JENVMAN.2024.120370](https://doi.org/10.1016/j.jenvman.2024.120370). 2024.
- **CIÊNCIA DE DADOS APLICADA À BIOTECNOLOGIA MARINHA: AVALIAÇÃO DO POTENCIAL BIOTECNOLÓGICO DAS ESPÉCIES BENTÔNICAS DE ARRAIAL DO CABO (RJ, BRASIL).** LIMA DA CUNHA M., LIMA DA CUNHA D., **GOMES DE MENEZES R.**, FONSECA E. M., COUTINHO R. JOURNAL OF BIOTECHNOLOGY AND BIODIVERSITY. V.11(3) P.88-99. ISSN 2179-4804. [HTTPS://DOI.ORG/10.20873/JBB.UFT.CEMAF.V11N3.16861](https://doi.org/10.20873/JBB.UFT.CEMAF.V11N3.16861). 2023.
- **PHOTOBIOLOGY OF SYMBIODINIACEAE HOSTED ON SIDERASTREA STELLATA IN THE SOUTHWESTERN ATLANTIC.** TUNALA L.P., GUERRA C.R., **MENEZES R.G.**, DIOGO, C.P., ALMEIDA T.B., DUARTE T.M., FREDERICO TAPAJÓS DE SOUZA TÂMÉGA F.T.S., COUTINHO R. REGIONAL STUDIES IN MARINE SCIENCE, V.63, ISSN 2352-4855, [HTTPS://DOI.ORG/10.1016/J.RSMA.2023.103027](https://doi.org/10.1016/j.rsma.2023.103027). 2023.
- **CARACTERIZAÇÃO DO RUÍDO DO NAVIO DE PESQUISA HIDROCEANOGRÁFICO VITAL DE OLIVEIRA.** **MENEZES, R.G.**, VALENTE, M.H.M., RIBEIRO, F. ANAIS HIDROGRÁFICOS, V.78 P.191, [ISSN 0373-9260](https://doi.org/10.1016/j.ahid.2022.03.001). 2022.
- **LONG-TERM MONITORING PROJECTS OF BRAZILIAN MARINE AND COASTAL ECOSYSTEMS.** CORDEIRO C.A.M.M., AUED A.W., BARROS F., BASTOS A.C., BENDER M., MENDES T.C., CREED J.C., CRUZ I.C.S., DIAS M.S., FERNANDES L.D.A., COUTINHO R., GONÇALVES J.E.A., FLOETER S.R., MELLOFONSECA J., FREIRE A.S., GHERARDI D.F.M., GOMES L.E.O., LACERDA F., MARTINS R.L., LONGO G.O., MAZZUCO A.C., **MENEZES R.**, MUELBERT J.H., PARANHOS R., QUIMBAYO J.P., VALENTIN J.L., FERREIRA C.E.L. PEERJ, 9:10:E14313. [DOI: 10.7717/PEERJ.14313](https://doi.org/10.7717/peerj.14313). PMID: 36389402; PMCID: PMC9653053. 2022.
- **URBAN BLUE: A GLOBAL ANALYSIS OF THE FACTORS SHAPING PEOPLE'S PERCEPTIONS OF THE MARINE ENVIRONMENT AND ECOLOGICAL ENGINEERING IN HARBOURS.** STRAIN E.M.A, ALEXANDER K.A., KIENKER S., MORRIS R., JARVIS R., COLEMAN R., BOLLARD B., FIRTH L.B., KNIGHTS A.M., GRABOWSKI J.H., AIROLDI L., CHAN B.K.K., CHEE S.Y., CHENG Z., COUTINHO R., **MENEZES R.G.**, DING M., DONG Y., FRASER C.M.L., GÓMEZ A.G., JUANES J.A., MANCUSO P., MESSANO L.V.R., NAVALXAVIER L.P.D., SCYPHERS S., STEINBERG P., SWEARER S., VALDOR P.F., WONG J.X.Y., YEE J., BISHOP M.J. SCIENCE OF THE TOTAL ENVIRONMENT, V.658 P.1293-1305, ISSN 0048-9697, [HTTPS://DOI.ORG/10.1016/J.SCITOTENV.2018.12.285](https://doi.org/10.1016/j.scitotenv.2018.12.285). 2019.

## BOOK CHAPTERS:

- **CHAPTER 8: THE RELEVANCE OF DATA MANAGEMENT FOR MARINE RESEARCH.** BIROCCHI P., LIZCANO-SANDOVAL L.D., **MENEZES R.G.**, ZAMORA-GARCÍA O.G., ELEGBEDE I. P.185-207 IN: CHALLENGES IN OCEAN GOVERNANCE IN THE VIEWS OF EARLY CAREER SCIENTISTS. OLIVEIRA B.M., PARDO J.C.F., TURRA A. (ORGS). DOI: [HTTPS://DOI.ORG/10.11606/9786587773384](https://doi.org/10.11606/9786587773384). INSTITUTO DE ESTUDOS AVANÇADOS DA UNIVERSIDADE DE SÃO PAULO, SÃO PAULO, 2022.
- **O PLÂNCTON COMO INDICADOR DA QUALIDADE DA ÁGUA NA AVALIAÇÃO AMBIENTAL INTEGRADA DA SUB-BACIA DO RIO BRANCO (RONDÔNIA, BRASIL).** GOMES E.A.T, **MENEZES, R.G.** P.211-232 IN: AMAZÔNIA: INSTRUMENTOS PARA GESTÃO DE RECURSOS HÍDRICOS. STACHIW R., CARAMELLO N. [HTTPS://WWW.RESEARCHGATE.NET/PUBLICATION/323399099\\_O\\_PLANCTON\\_COMO\\_INDICADOR\\_DE\\_QUALIDADE\\_DA\\_AGUA\\_NA\\_AVALIACAO\\_AMBIENTAL\\_INTEGRADA\\_DA\\_SUBBACIA\\_DO\\_RIO\\_BRANCO\\_RONDONIA\\_BRASIL](https://www.researchgate.net/publication/323399099_o_plancton_como_indicador_de_qualidade_da_agua_na_avaliacao_ambiental_integrada_da_subbacia_do_rio_branco_rondonia_brasil), CRV (EDITORA), CURITIBA, 2018.

## ARTICLES IN ONLINE JOURNALS:

- **COP26: SUSTENTABILIDADE EM XEQUE.** PUBLISHED IN 25/11/2021 AT CORREIO SABIÁ ONLINE JOURNAL, SUPPORTED BY ICFJ (INTERNATIONAL CENTER FOR JOURNALISTS) AND BY GOOGLE NEWS INITIATIVE STARTUPS ACCELERATIONS IN 2022. [HTTPS://CORREIOSABIA.COM.BR/ARTIGO-COP26-SUSTENTABILIDADE-EM-XEQUE/](https://correiosabia.com.br/artigo-cop26-sustentabilidade-em-xeque/)
- **POR QUE O AVANÇO DO PEIXE-LEÃO AMEAÇA A BIODIVERSIDADE E A PESCA NO LITORAL BRASILEIRO.** INTERVIEW PUBLISHED IN 09/03/2023 AT CORREIO SABIÁ ONLINE JOURNAL, SUPPORTED BY ICFJ (INTERNATIONAL CENTER FOR JOURNALISTS) AND BY GOOGLE NEWS INITIATIVE STARTUPS ACCELERATIONS IN 2022. [HTTPS://CORREIOSABIA.COM.BR/PEIXE-LEAO-PERIGOBIODIVERSIDADE/](https://correiosabia.com.br/peixe-leao-perigobiodiversidade/)