HENRIQUE OLIVEIRA MARQUES



DETAILS

henriqueomarques@gmail.com https://homarques.github.io/me/

PROGRAMMING SKILLS

R
Python
Java
MATLAB

LANGUAGES

Portuguese (Mother)

English

EMPLOYMENT HISTORY

Postdoctoral Fellow at University of Alberta, Canada

January 2020 — February 2021

Supervisor: Prof. Dr. Jörg Sander (jsander@ualberta.ca)

INTERNSHIPS

Visiting Researcher at University of Alberta, Canada

September 2017 — August 2018

Supervisor: Prof. Dr. Jörg Sander (jsander@ualberta.ca)

Teaching Assistant at University of São Paulo, Brazil

July 2015 — November 2015

Course: Data Structures

Supervisor: Prof. Dr. Ricardo J. G. B. Campello (ricardo.campello@newcastle.edu.au)

Teaching Assistant at University of São Paulo, Brazil

February 2014 — June 2014

Course: Algorithms and Data Structures II

Supervisor: Prof. Dr. Ricardo J. G. B. Campello (ricardo.campello@newcastle.edu.au)

Teaching Assistant at University of São Paulo, Brazil

July 2013 — November 2013

Course: Data Mining in Large Databases

Supervisor: Prof. Dr. Ricardo J. G. B. Campello (ricardo.campello@newcastle.edu.au)

EDUCATION

Computer Science, PhD, University of São Paulo, Brazil

March 2015 — November 2019

Thesis: Evaluation and Model Selection for Unsupervised Outlier Detection and One-Class Classification

Supervisor: Prof. Dr. Ricardo J. G. B. Campello (ricardo.campello@newcastle.edu.au)

Computer Science, MSc, University of São Paulo, Brazil

March 2013 — March 2015

Master's Thesis: On the Internal Evaluation of Unsupervised Outlier Detection

Supervisor: Prof. Dr. Ricardo J. G. B. Campello (ricardo.campello@newcastle.edu.au)

Computer Science, BSc, Federal University of Mato Grosso, Brazil

February 2008 — February 2013

Research Internships:

- Outlier Detection in Environmental Data, 2012
- Implementation of an Artificial Neural Network for Gap Filling in Micrometeorological Data, 2011
- Application of Artificial Neural Networks in Environmental Data, 2010
- Implementation of Classification Algorithms in the GAIIA system, 2009

Supervisor: Prof. Dr. Claudia A. Martins (claudia@ic.ufmt.br)

CO-SUPERVISION

William Adriano Alves, Federal University of São Carlos

2020 — Present

Level of Study: Masters

Research Title: Scalable Evaluation of Unsupervised Outlier Detection (Tentative Title)

Principal Supervisor: Prof. Dr. Murilo C. Naldi (naldi@ufscar.br)

1 LIST OF PUBLICATIONS

H. O. Marques, L. Swersky, J. Sander, R. J. G. B. Campello, A. Zimek. On the Evaluation of Outlier Detection and One-Class Classification: A Comparative Study of Algorithms, Model Selection, and Ensembles. Data Mining and Knowledge Discovery (DAMI). (Submitted)

H. O. Marques, R. J. G. B. Campello, J. Sander, A. Zimek. Internal Evaluation of Unsupervised Outlier Detection. Transactions on Knowledge Discovery from Data (TKDD), 2020.

L. Swersky, H. O. Marques, J. Sander, R. J. G. B. Campello, A. Zimek. **On the Evaluation of Outlier Detection and One-Class Classification Methods.** Proceedings of the International Conference on Data Science and Advanced Analytics (**DSAA**), 2016.

H. O. Marques, R. J. G. B. Campello, A. Zimek, J. Sander. On the Internal Evaluation of Unsupervised Outlier Detection. Proceedings of the International Conference on Scientific and Statistical Database Management (SSDBM), 2015.

T. M. Ventura, A. G. Oliveira, H. O. Marques, R. S. Oliveira, C. A. Martins, J. M. Figueiredo, A. G. Bonfante. Uma Abordagem Computacional para Preenchimento de Falhas em Dados Micro Meteorológicos. Brazilian Journal of Environmental Sciences (RBCIAMB), 2013.

T. M. Ventura, H. O. Marques, A. G. Oliveira, C. A. Martins, M. C. J. A. Nogueira, W. Texeira, J. M. Figueiredo, A. G. Bonfante. **Detecção de Outliers em Dados Micrometeorológicos**. Proceedings of the Brazilian Conference on Agroinformatics (**SBIAgro**), 2013.