Ricardo Pereira de Magalhães Cruz
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⌂ https://rpmcruz.github.io
○ https://github.com/rpmcruz

Education

2016-... Ph.D. student in Computer Science, University of Minho/Aveiro/Porto
2012-2015 MSc in Applied Mathematics, FCUP, University of Porto
2009-2012 BSc in Computer Science, FCUP, University of Porto

Experience

Nov 2015-Dec 2016 INESC TEC: Research grant working on machine learning under Prof. Jaime S. Cardoso
Jan-Apr 2015 Flykt consulting: text mining search engine [link]
Sept-Dec 2014 CMUP: Research grant on HIV immune response modelling
2008 Google Summer of Code: Redesign of OpenOffice.org layout engine (C++)
2007 Google Summer of Code: Port of YaST from Qt to GTK+

Publications

2018 Cruz, Ricardo, Margarida Silveira, and Jaime S. Cardoso. "A Class Imbalance Ordinal Method for Alzheimer's Disease Classification." 2018 International Workshop on Pattern Recognition in Neuroimaging (PRNI). IEEE, 2018. [link]
2018 Cruz, Ricardo, et al. "Binary ranking for ordinal class imbalance." Pattern Analysis and Applications 21.4 (2018): 931-939. [link]
2018 Fernandes, Kelwin, Ricardo Cruz, and Jaime S. Cardoso. "Deep image segmentation by quality inference." 2018 International Joint Conference on Neural Networks (IJCNN). IEEE, 2018. [link]
2017 Cruz, Ricardo, et al. "Constraining type ii error: building intentionally biased classifiers." International work-conference on artificial neural networks. Springer, Cham, 2017. [link]
2017 Pérez-Ortiz, María, et al. "Fine-to-coarse ranking in ordinal and imbalanced domains: an application to liver transplantation." International work-conference on artificial neural networks. Springer, Cham, 2017. [link]
2017 Cruz, Ricardo, et al. "Combining ranking with traditional methods for ordinal class imbalance." International work-conference on artificial neural networks. Springer, Cham, 2017. [link]
2017 Cruz, Ricardo, et al. "Ordinal class imbalance with ranking." Iberian conference on pattern recognition and image analysis. Springer, Cham, 2017. [link]
2016 Cruz, Ricardo, et al. "Tackling class imbalance with ranking." 2016 International joint conference on neural networks (IJCNN). IEEE, 2016. [link]

Teaching

Nov 2018 - Jan 2019 FEUP, University of Porto: Invited Assistant for Programming Fundamentals course in Python, with Professor João Correia Lopes [link]

Oct 2018 - Jan 2019 Mentor at Coursera for Andrew Ng's course: Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization [link]

June 6, 2017 Porto Python Meetup: Python for Scientific Computing, with João Machado of Fraunhofer [link]

April, 2017 INESC TEC, Open Day CTM: Python for Machine Learning [link]

October, 2016 FEUP Code Week: Python for Machine Learning

Machine Learning Portfolio

My Kaggle competitions [link]

Several implementations of machine learning methods [link]

Programming Portfolio

2015 Java Android games (Java/Android SDK) [link]

2009 Simple RSS reader (C++ and GTK) [link]

2008 GTK4Qt: Qt style mimetizing GTK+ (C++) [link]

2007 Apoo v2: Virtual machine for tutoring Assembly (developed in Python and GTK+) under Rogério Reis e Nelma Moreira (FCUP) [link]

2005 SuperTux, co-author: very popular game shipped by Magalhães computers (C++) [link]

Skills

Technical Programming (C, C++, Java desktop and Android, Python, R, Matlab, SQL), Applied Mathematics (data mining, statistics, modeling, optimization, agent-based systems)

Soft 2013 fundraising coordinator for EBEC competion (FEUP); 2014 head of the organization committee for the International Conference DGS III http://www.fc.up.pt/dgsiii/

Courses 2014 Coursera/Stanford Machine Learning; 2013 INESC agent-based modeling with NetLogo; 2013 BEST Novi Sad on cryptography

Languages Portuguese (native), English (B2)