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Robust rules for prediction and description

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List of publications

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2. C. M. Salgado, C. Azevedo, H. Proença, and S. M. Vieira. Missing data. *Secondary analysis of electronic health records*, pages 143–162, 2016
3. C. M. Salgado, C. Azevedo, H. Proença, and S. M. Vieira. Noise versus outliers. *Secondary analysis of electronic health records*, pages 163–183, 2016
4. H. M. Proença, R. Klijn, T. Bäck, and M. van Leeuwen. Identifying flight delay patterns using diverse subgroup discovery. In *2018 IEEE SSCI*, pages 60–67. IEEE, 2018
5. H. M. Proença and M. van Leeuwen. Interpretable multiclass classification by mdl-based rule lists. *Information Sciences*, 512:1372–1393, 2020
6. H. M. Proença, P. Grünwald, T. Bäck, and M. van Leeuwen. Discovering outstanding subgroup lists for numeric targets using mdl. In *Joint European Conference on Machine Learning and Knowledge Discovery in Databases*, pages 19–35. Springer, 2020
7. H. M. Proença, T. Bäck, and M. van Leeuwen. Robust subgroup discovery. *Data Mining and Knowledge Discovery (preprint available in arXiv:2103.13686)*, submitted

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 - 21 Pedro Thiago Timbó Holanda (CWI), Progressive Indexes
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Curriculum Vitae

Hugo Manuel Proença was born on January 21st, 1990, in Hong Kong. Then, he lived his first two years in Macau, after which he went to Lisbon, Portugal. Hugo conducted the first two years of high school (2004-2006) at Liceu Maria Amália Vaz de Carvalho in Lisbon, after which he finalized the last year at Escola Secundária Campos Melo, Covilhã. After that, he returned to Lisbon to join Instituto Superior Técnico, Universidade de Lisboa. There, he obtained a Bachelor degree in Physics Engineering in 2011, and a Master degree in Mechanical Engineering, specializing in Systems Engineering, in 2015. His Master thesis, titled “Optimizing Probabilistic Fuzzy Systems For Classification” was supervised by João Sousa, and with the support of Susana Vieira, Rui Almeida, and Uzay Kaymak. During the time of his Master thesis, Hugo conducted an internship as a Mechanical Engineer at Mettler Toledo in Changzhou, China.

Soon after his graduation, he performed a data science internship at the Cybernetics Department of the Czech Technical University in Prague. Then, he returned to Lisbon, where he worked with Susana Vieira, and Cátia Salgado, on two chapters of the MIT critical data book “Secondary Analysis of Electronic Health Records”.

In June 2016 he started his PhD in Computer Science at Leiden University as a part of the SAPPAAO project and joined both the Natural Computing and the Explanatory Data Analysis group, under the supervision of Thomas Bäck and Matthijs van Leeuwen. The project was a Dutch-Indian collaboration which involved a close collaboration with Dhish Saxena, Sarang Kapoor, and Divyam Aggarwal, at IIT Roorkee, and Rajesh Alla, and Arioli Arumugam, at GE Global Research in Bangalore. Here, he specialized on developing interpretable and statistically robust machine learning and data mining methods. From October 2020, for a period of six months, he was a researcher at Huawei Ireland Research Center.