INSTRUCTIONS TO AUTHORS

***This article is submitted for publication in the journal*** [***Data in Brief***](https://www.journals.elsevier.com/data-in-brief/)***. Before preparing your Data in Brief paper, please read the*** [***Guide for Authors***](https://www.elsevier.com/journals/data-in-brief/2352-3409/guide-for-authors) ***carefully to avoid delays in assigning your paper for peer review. For more guidelines on the format, see the article*** [***How to Write a Good Data in Brief Article***](http://media.journals.elsevier.com/content/files/datainbrief-18083024.pdf)***.***

***For all queries related to Data in Brief submissions please contact*** [***dib@elsevier.com***](mailto:dib@elsevier.com)

*Use the template below to write a description of your data for Data in Brief (DiB). Throughout your entire data article, keep in mind that you are simply describing data and not providing conclusions/interpretive insights. Please avoid using words such as study, results, and conclusions. Published Data in Brief examples can be found here:* [*http://www.sciencedirect.com/science/journal/23523409*](http://www.sciencedirect.com/science/journal/23523409)

***NOTE TO THOSE SUBMITTING AS A COMPANION PAPER TO A RESEARCH ARTICLE:*** *Zip all files relevant to the Data in Brief submission into a single .zip file, and upload as a “Data in Brief”-labelled item. Then, place all Data in Brief files (whichever supplementary files you would like to include as well as your completed Data in Brief template) into a .zip file and upload this as a Data in Brief item alongside your revised manuscript. Note that only this Data in Brief file will be transferred over to Data in Brief, so ensure all of your relevant Data in Brief documents are zipped into a single file.*

*Please fill in the template below, and delete all instruction text above and below before submitting.*

DATA IN BRIEF TEMPLATE

**Meta-Data (Mandatory information required for the transfer of your article to Data in Brief – will not be typeset)**

|  |  |
| --- | --- |
| **\*Title:** | *Precificação Inteligente* |
| **\*Authors:** | *José Ricardo Gonçalves Manzan*  *Ana Lúcia Araújo Borges*  *Murilo Marcineiro de Almeida* |
| **\*Affiliations:** |  |
| **\*Contact email:** | [*josericardo@iftm.edu.br*](mailto:josericardo@iftm.edu.br)  [*analuciaborges@iftm.edu.br*](mailto:analuciaborges@iftm.edu.br)  [*murilom.aikido77@gmail.com*](mailto:murilom.aikido77@gmail.com) |
| *\****Co-authors**: | *full names and e-mails.*  ***[NOTE: it is the corresponding authors responsibility to inform all co-authors if submitting as a companion paper to a research article]*** |
| **\*CATEGORY:** | Artificial Intelligence |

**Data Article**

**Title**:Precificação Inteligente

**Authors**: José Ricardo Gonçalves Manzan; Ana Lúcia Araújo Borges; Murilo Marcineiro de Almeida

**Affiliations**:

**Contact email**: [josericardo@iftm.edu.br](mailto:josericardo@iftm.edu.br); [analuciaborges@iftm.edu.br](mailto:analuciaborges@iftm.edu.br); [murilom.aikido77@gmail.com](mailto:murilom.aikido77@gmail.com)

**Abstract**

A definição do preço de um produto depende da combinação de diversas variáveis a serem analisadas. Depende principalmente do produto ao qual se está atribuindo o preço, dos custos envolvidos, dos preços praticados pela concorrência e das ações mercadológicas no atendimento aos consumidores (KOTLER, KELLER, 2006). Por um lado, a escolha de um preço muito baixo pode desencadear em um bom volume de vendas acompanhado de um baixo lucro. Por outro lado, a atribuição de um preço alto aumenta o lucro, mas pode reduzir de forma indesejada o volume de vendas. Portanto, esse é um problema importante em que os gestores, em geral, o enfrentam de forma empírica a partir da observação das variáveis citadas anteriormente e de sua própria experiência em negócios (COELHO et. al., 2015). O projeto tem como objetivo encontrar relações entre as variáveis envolvidas no problema de precificação de produtos com ferramentas de inteligência computacional, com vistas ao desenvolvimento de um sistema que permita apoiar gestores de supermercados na tomada de decisão por preços de produtos. O grande mérito das ferramentas de inteligência computacional é o de trabalhar com uma grande quantidade de variáveis e de reproduzir análises a partir de observações com precisão e eficiência. Para este problema, pretende-se utilizar duas ferramentas de inteligência artificial: redes neurais artificiais e algoritmos genéticos. As redes neurais artificiais (RNAs) são programas de computador baseadas no funcionamento dos neurônios biológicos que aprendem por experiência, tentativa e erro. Um algoritmo genético é uma técnica de busca utilizada para achar soluções aproximadas em problemas de otimização. Encapsulando a rede neural modelada, o algoritmo genético será responsável por realizar uma busca inteligente num espaço dos possíveis preços encontrando o faturamento ótimo.

**Specifications Table** [*Please fill in right-hand column of the table below.*]

|  |  |
| --- | --- |
| Subject area | *Engenharia de computação* |
| More specific subject area | *Inteligência artificial aplicada a controle de precificação em varejistas* |
| Type of data | *Tabelas* |
| How data was acquired | *Ferramenta de inteligência artificial mista* |
| Data format | *Raw, filtered, analyzed, etc.* |
| Experimental factors | *Brief description of any pretreatment of samples* |
| Experimental features | *Very brief experimental description* |
| Data source location | *City, country, and/or latitude and longitude (and GPS coordinates) for collected samples/data, if applicable* |
| Data accessibility | *State if data is with this article or in public repository; if public repository, please explicitly name repository and data identification number, and provide a direct URL to data. We recommend* [***Mendeley Data***](https://data.mendeley.com/)*if you do not have a trusted repository.* |
| Related research article | *If your data article is submitted as a companion paper to a research article, please cite your associated research article here; you may reference this as “in press.”*  *If this is a direct submission to* Data in Brief*, you may cite the most relevant research article here.* |

**Value of the Data**

*Os dados obtidos comprovam que o uso de inteligência artificial podem beneficiar muitos setores, assim como o setor varejista. O uso da ferramenta no processo de precificação, além de poupar tempo, garante o lucro máximo, pois considera todas as variáveis salvas no banco dos varejistas.*

**Data**

[*Briefly describe the data you are sharing with this data article here, to give the reader context before presenting the materials and methods.]*

**Experimental Design, Materials, and Methods**

[*Offer a* *complete description of the experimental design and methods used to acquire the data and, where applicable, to perform the analysis. Include any relevant figures and tables needed to understand the data fully. Please also provide, where applicable, any code files used for base-level analysis or filtering of the data.*]

[*(NO) Conclusions/Summary:* Data in Brief *papers are distinctly different from research articles and should* ***not*** *contain interpretations and conclusions. Do not include a Conclusion or Summary section.*]

**Acknowledgments**

**References**

[*Please include all references relevant to the data described here; references are not limited. If your data article is cosubmitted via another Elsevier journal, please cite your associated research article here. You may reference this as “in press.”*]

HEALY, E. W., YOHO, S. E., WANG, Y., WANG, D. (2013). An algorithm to improve speech recognition in noise for hearing-impaired listeners. **The Journal of the Acoustical Society of America,** 134(4), 3029-3038. 2013. Retrieved from http://scitation.aip.org/content/asa/journal/jasa/134/4/10.1121/1.4820893 doi: http://dx.doi.org/ 10.1121/1.4820893

HUANG, G., HUANG, G.-B., SONG, S., YOU, K. (2015). Trends in extreme learning machines: **A review. Neural Networks**, 61(0), 32 - 48. 2015. Retrieved from http://www.sciencedirect.com/science/article/pii/S0893608014002214 doi: http://dx.doi.org/10.1016/ j.neunet.2014.10.001

JESÚS RUBIO, J., ORTIZ-RODRIGUEZ, F., MARIACA-GASPAR, C. R., TOVAR, J. C. (2013). A method for online pattern recognition of abnormal eye movements. **Neural Computing and Applications**, 22(3-4), 597–605. 2013.

KOTLER, P; KELLER, K. L. **Administração de Marketing**. 12 ed. São Paulo: Pearson, 2006.

MORRISH, S. C. Entrepreneurial marketing: a strategy for the twenty - first century? **Journal of**

**Research in Marketing and Entrepreneurship** , v. 13, n. 2, p. 110 -119, 2011.

*IMPORTANT NOTE REGARDING REFERENCE LIST OF THE RESEARCH ARTICLE:*

*The publication of a research article and the related data article in* Data in Brief *are not synchronized to take place at the same time. The* Data in Brief *files are transferred to* Data in Brief *at the time the research article is accepted, so generally the research article is published before the data article. Articles are linked to each other in two ways:*

* *Via “PII-linking” on ScienceDirect. Readers accessing either article on ScienceDirect clearly see that each article “refers to” the other. PII-linking is executed by Elsevier for all articles automatically transferred to* Data in Brief *from a participating research journal.*
* *Via the reference list in the data article. It is not recommended that you include a reference to the data article in your research article. Although* Data in Brief *editors strive to provide a decision to authors as quickly as possible, in some instances the proof of the research article may be ready before the related data article is in press. In such cases, authors have the option of holding the proof, i.e., not returning their corrections until the data* *article is accepted and is in press. If authors don’t want to hold publication of the research article, they can instead remove the reference to the data* *article from the reference list of the research article. The articles will still be linked on ScienceDirect via PII-linking, and the data article, published later, will include the reference to the research article.*