

Research Area

Abstract

Nowadays the field of data analytics and data mining (DM) is taking a new role. The role that is undertaking is as an enabler of educational institutions to improve key performance indicators (KPI's). These KPI's are beyond traditional metrics to help improve the organizational performance and the learning - teaching process. There are many institutions that are analyzing and exploiting their data and gaining insights from this process. Western Governors University develops customized study plans for students. Paul Smith's College used analytics to increase graduation rates, The University of Washington partnered with the company Persistence Plus to improve grades in online course, the Open University is using their current historical data to improve retention rates. Therefore a new topic in data analysis is born and is termed Educational Data Mining (EDM). EDM is turning out to be an interesting topic in research and the future depicts that more and more institutions will use it as a strategic endeavor in Educational Institutions¹. EDM integrates different approaches as database systems, data warehousing, statistics, machine learning and others.

Keywords: Data Analytics, Data Mining, Organizational Performance, Educational Data Mining

¹ <http://web.engr.illinois.edu/~hanj/pdf/ency99.pdf>
<http://net.educause.edu/ir/library/pdf/ers1207/ers1207.pdf>

Future Research

Abstract

The importance of data analytics is growing and a new sub-field of studies is in its infancy. This young field is called Educational Data mining and its main purpose is to analyze data by using a different number of techniques as: extraction transformation loading (ETL), Class description, classification, prediction, clustering, time series-analysis and more. EDM integrates different approaches as database systems, data warehousing, statistics, machine learning and others. In this research a data warehouse will be set and an ETL process will be done in order to extract data in OLTP databases in a prestigious University. Moreover an experiment will be conducted with this educational data, the experiment will start with the description of the state of the art of EDM and it will continue with the development of a method for exploring data and predicting trends that will contribute to improve educational KPIS or to analyze current problems to increase organizational performance.

Keywords: Data Analytics, Data Mining, Organizational Performance, Educational Data Mining

CONFERENCE 1

- a. The 8th International Conference on Educational Data Mining June 26, 2015 - June 29, 2015, UNED, Madrid, Spain
- b. EDM 2015
- c. <http://www.educationaldatamining.org/EDM2015/>
- d. February 9

Paper submission to the EDM 2015 Journal Track

EDM 2015 Journal Track invites high-quality submissions that present original work in the area of Educational Data Mining. Accepted papers will be published in JEDM shortly after the final versions are received, and the authors will present their work at EDM 2015 conference. An abstract of accepted paper with the reference to the JEDM publication will also appear in the conference proceedings.

To submit to the journal track, authors have to:

- [use JEDM paper submission system](#) and [follow JEDM guidelines](#).
- choose "EDM2015 Journal Track" submission type during the submission process.

Important dates for the EDM 2015 Journal Track

JEDM Editorial Team makes a commitment to keep reviewing cycles as short as possible keeping in mind the conference deadlines. For the initial submission of the paper, the authors can expect to receive the reviews within 12 weeks.

We encourage prospective authors to submit their work to the journal track as early as possible, but before 20 January 2015. As such, reviewing processes of papers submitted after this date have a high chance of not being completed in time to allow the papers to be included in the EDM 2015 program. Based on the authors' preferences, these papers will either roll-over to the EDM 2016 Journal track or be treated as regular journal submissions.

Reviewing process and potential outcomes of the evaluation process

The submissions will be treated as regular JEDM submissions with the same quality criteria. Each paper will be reviewed by three experts in the field.

Depending on the received reviews and suggestions of the associate editors the EDM2015 Journal Track chair can decide to:

- "Accept" or "Accept conditional to revisions" in case the paper meets the journal acceptance criteria. If the final acceptance of the paper occurs before April 20th, 2015, a regular presentation slot for the paper will be allotted in the EDM 2015 program; if the final acceptance happens after April 2015, based on the authors' preferences, the paper will either roll-over to the next EDM 2016 Journal track or be treated as regular JEDM accepted submission.
- "Reject with encouragement to resubmit" in case the paper in its current form does not meet the quality criteria of JEDM, but the editor sees how the author(s) can improve their work to meet these criteria.
- "Reject" in case the paper does not meet the quality criteria of JEDM.

e. International Society Educational Data Mining

CONFERENCE 2

- a. 17th International Conference on Educational Data Mining
- b. ICEDM 2015
- c. <http://www.waset.org/conference/2015/06/copenhagen/ICEDM>
- d. April 10, 2015
- e. Link: <http://www.waset.org/apply/2015/06/copenhagen/ICEDM?step=1>
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- f. World Academy of Science Engineering and Technology

Revista 1.

- a. Expert Systems with Applications
- b.
- c. <http://www.journals.elsevier.com/expert-systems-with-applications/>
- d.
- e. Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.
- f. Elsevier

Revista 2.

- a. International Journal of information and Electronics Engineering
- b. IJICE
- c. <http://www.ijice.org/>
- d. Sep 2015
- e. IJICE welcomes author submission of papers concerning any branch of the information and electronics engineering and their applications in business, industry and other subjects.

About

All published journal papers are refereed by the international competent researchers and scientists. Therefore, a full double - blind international refereeing process is used in which: Papers are sent to reviewers for their peer review process. The reviewers' recommendations determine whether a paper will be accepted / accepted subject to change / subject to resubmission with significant changes / rejected.

For papers which require changes, the same reviewers will be used to ensure that the quality of the revised paper is acceptable.

All papers are refereed, and the Editor-in-Chief reserves the right to refuse any typescript, whether on invitation or otherwise, and to make suggestions and/or modifications before publication.

- f. University of Brunei Darussalam