



UNIVERSITY
OF TAMPERE

EXPAND YOUR SKILLS.
UNDERSTAND THE CHANGE.



COURSES OF MASTER'S DEGREE PROGRAMME IN

COMPUTATIONAL BIG DATA ANALYTICS

From data to information and from information to new insights



LUO FACULTY OF NATURAL SCIENCES



COURSES IN COMPUTATIONAL BIG DATA ANALYTICS

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The analysis of data has a central role in the modern information society. Organizations in both the public and private sector are collecting vast data sets, and an increasing amount of public sector data is made open. However, data - assumed to be an important asset for organizations - is useless unless it is analyzed. Analysis is required to find regularities such as trends or groupings, and to relate the data to other data sets within an organization or in scattered online repositories.

Analysis of data needs practical data processing skills, which you can study at University of Tampere. You can apply for courses belonging to an international Master's degree Programme in Computational Big Data Analytics. Thus, you will study together with the degree students. You can start the first academic modules in October 2017 and you can go on studying until spring 2019. It's possible to complete 10 courses in total and each course is at least 5 ects.

By completing the courses, it's possible to learn activities such as data cleansing, data integration, modeling and prediction, interactive and iterative visualization of data and models for the refinement of hypotheses and models, and the presentation of intermediate and final results to the decision-makers using visualization and reporting methods. Successful analysts need skills in both computational and statistical topics.

Suitable applicants

- You have a university level Bachelor's degree or equivalent in Computer Science, Statistics or Mathematics or in a closely related field
- You have some programming skills
- You have fluency in English for academic studies

Available academic modules and starting semester

- Introduction to Big Data Processing, autumn 2017 and 2018
- Recommender Systems, autumn 2017 and 2018
- Time Series Analysis 1, autumn 2017
- Data Mining, spring 2018
- Machine Learning Algorithms, spring 2018
- Dimensionality Reduction and Visualization, spring 2018 and 2019
- Introduction to Bayesian Analysis 1, spring 2018
- Knowledge Discovery, autumn 2018
- Neurocomputing, spring 2019
- Digital Image Processing, spring 2019

Academic modules are chargeable.

Contacts and further information

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<http://taydennyskoulutus.uta.fi/2017/09/tulossa-courses-in-computational-big-data-analytics/>

