Laurea / B.A. in Global Governance

Course Description

Nowadays, many organizations produce and/or analyse huge quantities of data, which is becoming a key asset for their strategies. The main objective of this course is to introduce students to the notion of algorithmic intelligence, by providing a basic toolkit of algorithmic and quantitative methods to analyse and extract value from data, in particular Big data. In addition, since IT systems and data are everywhere and Internet of Things devices increasingly surround us, the course introduces basic notions of cybersecurity, cryptocurrencies and Distributed Ledger Technology.

Teaching Method

Lectures will be based on oral presentations. Some kind of analysis will also be presented at the board, and used for open discussions. Some part of every lecture will be dedicated to in-class discussions and interaction between the instructor and students will be strongly encouraged. A software tool for social network analysis and recommendation systems will be used during the lessons.

Schedule of Topics

Topic 1	Fundamentals in algorithms and data organization
Topic 2	Recommendation algorithms
Topic 3	Social networks
Topic 4	Big data analytics
Topic 5	Cybersecurity
Topic 6	Cryptocurrencies and Distributed Ledger Technology (Bitcoin and blockchain)

Textbook and Materials

Lecture notes and course material, including articles and videos, will be made available throughout the course through the course web site.

Assessment

There will be a midterm and a final, plus a presentation using a software tool for network analysis. Midterm and final will be 85% of the final grade, the presentation will be 15% of the final grade. If you do not attend at least 15 2-hour lectures or do not complete successfully midterm and final, you will have to take an oral exam.

Office hours

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E-mail and office phone number

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NOTE: If you are an **Erasmus or a non Global Governance student** who would like to attend one or more courses in the Global Governance programme, please be aware that, **before enrolling in the course**, you should have read the code of conduct and the procedural rules characterizing our programme. We assume that, if you enroll in the course, **you have read and accepted all Global Governance values and rules**. Notice that attendance is required from the very first lesson and you need to attend at least 80% of the course to be considered an attending student.