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 and data are everywhere and Internet of Things devices increasingly surround us, the course introduces basic notions of cybersecurity and digital currencies.

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. Interaction between the instructor and students will be strongly encouraged.

Schedule of Topics

Topic 1	Fundamentals in algorithms and data organization
Topic 2	Recommendation algorithms
Topic 3	Social networks
Topic 4	Big data and analytics
Topic 5	Cybersecurity
Topic 6	Digital currencies (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. Midterm and final will be 50% of the final grade each. 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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NOTE: Since the course is provided for a limited number of students, **Erasmus or non-Global Governance students** who would like to attend the course need to contact the Secretariat of Global Governance by e-mail global.governance@uniroma2.it for registration and inform the Professor of the course. They are required to sign a code of conduct like all Global Governance students, accepting all values and rules. Please read it carefully before enrolling and notice that attendance is required from the very first lesson.