



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI SCIENZE GIURIDICHE

Description of the Research Scholarships

GELSI (Governance, Ethical, Legal, Social Implications) Analysis of Digital Technologies: Foundational Problems

Outline

The two research scholarships will enable candidates, who already hold the equivalent of a Master degree in Computer Science, Economics, Jurisprudence, Philosophy, Statistics or other relevant disciplines, to research the new challenges posed by the GELSI (Governance, Ethical, Legal, Social Implications) of digital technologies and their development.

Topic

Given the rapid growth and increasing presence of digital technologies and their relevance today, it is essential to ensure that they do not cause harmful and unintended consequences. For example, machines learn from large amounts of data by identifying patterns and applying statistical models to predict the most likely outcomes. What is troubling is that the data from which the algorithms learn can sometimes contain subtle biases, and human oversight is not provided in all cases. Therefore, it is critical to ask, more broadly, what foundational problems are posed by the development of digital technologies and what their GELSI require in terms of policies and ethical analysis. This project will look at the possibility of developing innovative results in our understanding of the GELSI of digital technologies and ways in which they can be managed ethically. It will consider new forms of solving the socio-ethical challenges posed by the digital evolution, in view of developing the right social policies that may tackle them, by focusing on specific technological developments or innovations identified in collaboration with the researchers (e.g. AI, IoT, Quantum Computing, Platform Governance, new EU digital regulations, etc.).

Deliverables

The research will deliver an article to be published in an international, peer-reviewed journal.