



FutureData4EU

Training Future Big Data Experts for Europe



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



UNIVERSITÀ
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degli Studi
di Ferrara



UNIMORE
UNIVERSITÀ DEGLI STUDI DI
MODENA E REGGIO EMILIA



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Unlocking the Future of Big Data - Summary

- General overview of the Thematic Area
- List of the Doctoral Positions and Universities involved in Civil Security for Society
- Sub Areas of Research to be developed during the project
- Contacts

Overview of the Thematic Area

Main goals:

- responds to the challenges arising from persistent security threats, including pandemic, as well as natural and man-made disasters,
- support the implementation of EU policies related to physical, digital, and pandemic security in the post-COVID and climate-change environment,
- train the data-science experts of tomorrow through an interdisciplinary, international and cross-sectoral approach

Methodology:

- training in research and transversal skills in the trans-disciplinary field of Big Data
- Improvement in prevention and resilience developed by means of Big Data and High Performance Computing (HPC).

List of the Doctoral Positions and Universities involved **Civil Security for Society (3 total)**

1

UNIBO

— Prevention and management of natural disasters through big data: EU law avenues

1

UNIFE

— Enhancing Risk Prevention in Society: Advanced Mathematical Methods and Computer Science Techniques

1

UNIPR

— Design of off-shore structure through Physically Based and Data-Driven Models

Sub Areas of Research to be developed during the project



- Analysis of supranational regulations on data and their application to disaster management mechanisms
- Interaction of European Union data regulation with its space policy



Advanced mathematical methods for:

- Stochastic methods for global optimization
- Mitigating risk in epidemics
- Prevention of cyber-attacks



Development of HPC and ANN algorithms to secure clean energy production:

- Fluid-structure interaction
- simulations of extreme waves in off-shore environment

For any query:
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