

# RESULTS STEP 3 – INTERVIEW THEMATIC AREA – DIGITAL, INDUSTRY AND SPACE

Please note that this file represents the result of Step 3 of the evaluation. As stated in the Call for Application, the final list of successful candidates, complete with the allocation of the individual Doctoral Positions, will be published starting from September 24, 2024.

Please check your ID Number on your application on your Studenti Online profile (https://studenti.unibo.it) "Request in Progress"



ID Number	Score	Results	Suitabilities for open Doctoral Positions
3276207	87,39	Admitted	3
3256592	95,22	Admitted	1
3275221	80,78	Admitted	2;3;5
3276677	74	Admitted	1;5
3279740	74,06	Admitted	3;5
3276025	70,33	Admitted	1;5
3272155	78,89	Admitted	2;3;5
3279708	90,5	Admitted	5
3240150	89,39	Admitted	2
3276070	64,83	Not Admitted	-

#### N:B – Doctoral positions are defined by the following numbering:

#### Thematic Area 1 - Health

- 1- Al-based neurobiological phenotyping of patients with expansion repeats and brain disorders (UNIBO)
- 2- BISTAT Big data and statistical theory for enhanced inferences in domain sciences (UNIBO)
- 3- Data driven determination of statistical properties of proteins (UNIBO)
- 4- Enhancing Dermatologic Interventions through Big Data-Driven Understanding of Placebo Effects (UNIBO)
- 5- Artificial Intelligence-Based Perioperative Guidance Tool for Vitreoretinal Surgery (UNIFE)
- 6- Evolutionary perspective on health and medicine through the lens of paleogenomics (UNIFE)
- 7- Big-data from single-cell multiomics in somatic stem cells for clinical application (UNIMORE)
- 8- High-performance computing and data analysis in drug design and discovery (UNIPR)
- 9- Illuminating dark gene targets in the human genome through big data analysis (UNIPR)
- 10- Implementation of artificial intelligence algorithms in the sonographic assessment of fetal anatomy (UNIPR)
- 11 A Radio-immune-genomic Approach and Big Data Integration to Identify Predictive Signatures for the Response to Immunotherapy in Solid Tumors (UNIPR)

# Thematic Area 2 - Culture, Creativity and Inclusive Society

- 1- Architecture: Critical Theory and Practice in the Age of AI (UNIBO)
- 2- Data Analytics and AI for supporting legislative assistance at WIPO: a neuro-symbolic approach (UNIBO)
- 3- Enhancing cultural heritage with generative AI and Big Data: New avenues for accessibility and engagement (UNIBO)

## Thematic Area 2 - Culture, Creativity and Inclusive Society

- 4- Generative Artificial Intelligence and Creativity (UNIBO)
- 5- Large Language Models for a personalised access to large cultural data (UNIBO)
- 6- Normative Reasoning and Fairness in Explainable AI for an Inclusive Society (UNIBO)
- 7- Unravelling the Evolution of Lithic Tools Morphology: Leveraging Big Data and Geometric Morphometrics in Archaeological Analysis (UNIFE)
- 8- Training academic language skills in the age of AI: Creating digital tools to help students write doctoral theses in English (UNIMORE)
- 9- Big Data Analysis and Practical Reasoning for Religious Conflict Resolution (UNIMORE)

## Thematic Area 3 - Culture, Creativity and Inclusive Society

- 1- Prevention and management of natural disasters through big data: EU law avenues (UNIBO)
- 2 Enhancing Risk Prevention in Society: Advanced Mathematical Methods and Computer Science Techniques (UNIFE)
- 3- Design of off-shore structure through Physically Based and Data-Driven Models (UNIPR)

# Thematic Area 4 - Digital, Industry and Space

- 1- Data mining for space borne astrophysical and cosmological observations (UNIFE)
- 2- Deep learning for renal pathology prognosis prediction (UNIMORE)
- 3- Big Data Analysis for Industrial Diagnostic (UNIMORE)
- 4- Spin Systems for Quantum Technologies: advanced computing techniques, new concepts and realistic material simulations (UNIPR)
- 5- Artificial Intelligence to support manufacturing through production efficiency, quality and strategies of maintenance (POLIMI)

#### Thematic Area 5 - Climate, Energy and Mobility

- 1- Combining Machine Learning and Computational Chemistry to explore the chemical space of functional materials (UNIBO)
- 2- Numerical downscaling at the local microscale for the evaluation of climate change adaptation and mitigation measures (UNIBO)
- 3- Systems for the operation of power distribution networks in the presence of communities of electricity producers and consumers (UNIBO)

## Thematic Area 5 - Climate, Energy and Mobility

- 4- Satellite insights: Socio-economic data for Sustainable Development (UNIFE)
- 5- Data Science for Sustainable Mobility (UNIMORE)
- 6- Exploitation of big data from HVAC plants, vehicle systems and sensors, weather stations, ground measurements and satellites to support urban sustainability (UNIMORE)
- 7- Beyond Deterministic Models in Smarter Power Electronic Converters for Sustainable Energy Management in Home, Industry and Transportation (UNIPR)
- 8- Electric vehicles: Infrastructure system and charging strategies based on Renewable Energy Sources (POLIMI)
- 9 -The role of digital data in interpreting complex urban phenomena and supporting mobility-related policies (POLIMI)

# Thematic Area 6 - Food, Bioeconomy, Natural Resources, Agriculture and Environment

- 1- Animal Biodiversity Big Data Integration (UNIBO)
- 2- Big data for Water-Food-Energy-Sustainable Agriculture Nexus (UNIBO)
- 3- Edge Artificial Intelligence for underwater habitats characterization (UNIBO)
- 4 Environmental effects on calcification and accumulation of pollutants in marine calcifiers (UNIBO)
- 5- Advancing AGRicultural research through OMICS science: development of advanced metabolomics and proteomics approaches for the characterization of crop plant matrices (UNIFE)
- 6- Increasing productivity, sustainability and ecoefficiency in organic farming by using microorganisms to promote plant growth and control plant pathogens (symbiotic agriculture) UNIMORE)
- 7- Smart Analysis of Agricultural IoT Data (UNIPR)
- 8- Big data for mapping consumers' trends and boosting food sustainability and healthy food choices (UNIPR)
- 9 -Monitoring of the eco-physiological response of crops to agrophotovoltaic conditions (UCSC)
- 10- A systems biology approach to understand the mechanisms underlying heat stress resilience in dairy cows (UCSC)

# **Thematic Area 7 - Enabling Technologies**

- 1- Big Data handling in Next-generation Particle and Astroparticle Physics Experiments (UNIBO)
- 2- Computational Approaches in (Big) Data-driven Medical Modeling (UNIBO)
- 3- Mathematical Modelling for Medical Practice (UNIBO)

# **Thematic Area 7 - Enabling Technologies**

- 4- Neuro-symbolic artificial intelligence for big data (UNIFE)
- 5- Methodologies and technologies of data science and data analytics: beyond the analytics of high energy physics big data (UNIFE)
- 6- Data-driven modeling of brain circuits for advanced digital twins (UNIMORE)