



IoT Data management and analysis for  
Sustainable Agriculture - GreenFieldData

European Union HORIZON Marie Skłodowska-Curie  
Action (MSCA) Joint Doctoral Network



**14 OPEN PhD POSITIONS** in the field of computer science and digital agriculture funded from the European Union HORIZON Marie Skłodowska-Curie Action (MSCA) Joint Doctoral Network

**Project IoT Data management and analysis for Sustainable Agriculture - GreenFieldData**

**Project portal:** <https://www.eu4greenfelddata.eu/>

**Duration:** 1 Sep, 2026 - 31 Aug, 2029

Are you an aspiring researcher ready to drive the digital and green transition in agriculture? The GreenFieldData project offers an outstanding opportunity to pursue a PhD within a high-calibre international and interdisciplinary network, funded under the prestigious Marie Skłodowska-Curie Actions (MSCA) Doctoral Networks (Grant agreement ID: 101226371).

### **Pillar of excellence**

The GreenFieldData project is an initiative of Pillar 1 (Excellence) of Horizon Europe. This ambitious network unites 12 leading academic institutions from 7 EU countries, supported by 24 associated non-academic and academic partners. The goal of the project is to train a new generation of researchers who will provide robust and human-centric solutions to the challenges posed by climate change and socio-economic constraints.

### **Exceptional financial support for PhDs**

The MSCA Joint Doctorate provides a highly competitive and financially attractive employment package for the entire 36-month duration of the PhD contract including:

- living allowance: a monthly gross salary contribution,
- mobility allowance: an additional monthly contribution to cover private mobility-related costs (e.g., relocation, travel),
- family allowance: a monthly allowance for researchers with family obligations.

### **Double PhD degree**

All 14 Doctoral Candidates will be enrolled in Double Degree Doctorate programmes, guaranteeing joint supervision from at least two prominent international universities, with secondments in industry. Double PhD degrees will be granted by two universities in Europe



from the list of the main partners:

<https://www.eu4greenfelddata.eu/network/beneficiary-partners>

## 14 Cutting-edge research topics on IoT and sustainable agriculture

The research within the project will focus on the convergence of advanced data science and Internet of Robotic Things (IoT) to foster sustainable agriculture and define efficient low input practices.

GreenFieldData is seeking bright minds to tackle advanced topics such as advanced database management systems, AI, edge-fog-cloud architectures, and advanced data analytics applied to real-world agricultural challenges.

Employment: an accepted PhD student will be full-time employed (with pension rights, social security, and health insurance), based on a 3-year contract.

PhD topics (<https://www.eu4greenfelddata.eu/phd-positions-application/list-of-phds>)

- **PhD-A: Optimized IoT network for enhanced data quality of IoT cereals production practices.** PhD grantors: Aarhus University (DK) & Clermont Auvergne University (FR); keywords: IoT network optimisation, data quality
- **PhD-B: Data collection and analysis empowered with AI for robotized Olive Oil Precision Farming.** PhD grantors: University College Dublin (IE) & Instituto Superior Técnico (PT); keywords: AI, precision farming, robotics
- **PhD-C: Powering data-driven sustainability assessment tasks in agri-food systems with IoT-data Data lakes and Large Language Models.** PhD grantors: Aarhus University (DK) & Université Libre Bruxelles (BE); keywords: data lakes, LLMs, sustainability assessment
- **PhD-D: Human-centric Digital twins for monitoring robotized biostimulants application practices.** PhD grantors: University Milan (IT) & Université Libre Bruxelles (BE); keywords: digital twins, human-centric systems, robotics
- **PhD-E: Optimizing Images Quality and Deep Learning Methods for Vineyard Disease Detection.** PhD grantors: University Padova (IT) & Poznan University of Technology (PL); keywords: deep learning, image quality, crop disease
- **PhD-F: Optimized Olive crop irrigation based on high quality soil data using IoT networks.** PhD grantors: Instituto Superior Técnico (PT) & University Toulouse (FR); keywords: IoT networks, soil data, irrigation optimisation
- **PhD-G: Characterization of abiotic stress of trees using AI methods on acoustic signals.** PhD grantors: University College Dublin (IE) & INRAE (FR); keywords: AI, acoustic signal analysis, abiotic stress



- **PhD-H: Monitoring of grazing animals using sensors and data science.** PhD grantors: University Liège (BE) & University College Dublin (IE); keywords: sensors, data science, animal monitoring
- **PhD-I: Assessing soil and crop health across sugar-beet producing farms.** PhD grantors: Poznan University of Technology (PL) & University Liège (BE); keywords: data integration, data science, sensors, soil/crop health assessment
- **PhD-L: Natural language based interaction for robotized biostimulant practices.** PhD grantors: CNRS (FR) & University Milan (IT); keywords: natural language processing, robotics, biostimulants
- **PhD-M: Assessing drought effects on grassland using IoT-enabled visual sensors.** PhD grantors: Poznan University of Technology (PL) & INRAE (FR); keywords: sensors, visual data, drought effects
- **PhD-N: Optimization-simulation coupling for the GHG emission based supervision and planification of a fleet of autonomous agricultural robots.** PhD grantors: Aarhus University (DK) & INRAE (FR); keywords: optimisation, simulation, autonomous robots, GHG emissions
- **PhD-O: Adaptive navigation for agricultural robots using database-driven insights.** PhD grantors: Université Libre Bruxelles (BE) & INRAE (FR); keywords: database insights, adaptive navigation, robotics
- **PhD-P: Agricultural AI data integration and management based on LLM.** PhD grantors: University Toulouse (FR) & University Padova (IT); keywords: AI, data integration, large language models

**APPLICATION DEADLINE: 15th April 2026**

Eligibility criteria and application procedure:

<https://www.eu4greenfelddata.eu/phd-positions-application/how-to-apply>

For each PhD topic there is a separate application link at:

<https://www.eu4greenfelddata.eu/phd-positions-application/list-of-phds>

**Each candidate can apply for maximum 3 topics.**

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The list of contacts to PhD supervisors: <https://www.eu4greenfelddata.eu/contact2>

