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We ask for your collaboration to
determine which recommendations
seem to you to be most urgent

Engineering as an SDG facilitator: Artificial Intelligence and other innovative digital technologies

Provide your opinion for each **Sustainable Development Goal (SDG)** that is of interest to you.

More information on the web: <https://dasci.es/ia4ods>



R1.1 - Governance based on blockchain blockchain for transparent decision-making against poverty

R1.2 - Realistic, objective and universal measurement of poverty guided by Big Data

R1.3 - Automation committed to the economic safety of employees and underpinned by education and innovation

Survey: <http://allourideas.org/SDG1>



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R2.1 - Accessible platforms for data integration in agricultural-food production

R2.2 - Equality-aware decisions for food sustenance through governance and Big Data

R2.3 - Traceable food production and supply under Artificial Intelligence and Blockchain

R2.4 - Early Warning Systems to anticipate to risks in safe food sustenance

R2.5 - Promoting sustainable, healthy and responsible eating across the population

Survey: <http://allourideas.org/SDG2>



R3.1 - Medical prediction and diagnosis through fair, accountable, transparent and ethical AI

R3.2 - Homogenization of multiple medical and health data sources

R3.3 - Technological training of health/medical professionals

R3.4 - Smart territories to improve health security detecting and controlling infectious diseases

R3.5 - Personalized recommendations for healthy habits

Survey: <http://allourideas.org/SDG3>



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R4.1 - AI for personalized learning and inclusive education

R4.2 - Use of virtual/augmented reality techniques and mobile apps to disseminate teaching contents, and support education under different learning styles

R4.3 - Open and free education with recommended contents to favour lifelong and ubiquitous learning

R4.4 - Conversational assistants for academic management and quality evaluation of teaching received

R4.5 - Universal use of institutional frameworks that guarantee the treatment of information by any student with equity and security

Survey: <http://allourideas.org/SDG4>



R5.1 - Basic and specialized training in new technologies for girls and women

R5.2 - Development, and enforcement, of strong legislation in defense of women and girls

R5.3 - AI for gender bias detection in recruitment processes or deliberative bureaucracies

R5.4 - AI for the detection of denigrating or discriminatory content and behavior towards women and girls in social networks

Survey: <http://allourideas.org/SDG5>



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6 CLEAN WATER AND SANITATION



R6.1 - IoT technologies for monitoring all kinds of water facilities, networks and ecosystems

R6.2 - Digital Twins on water infrastructures, on water-linked ecosystems and contaminatio process that allow their study, experimentation and dissemination

R6.3 - Intelligent techniques for the prediction and detection of failures and breaks in water infrastructures, as well as the detection of variables or parameters for which there is no specific sensorization

R6.4 - Management and governance of resources, infrastructures and ecosystems related to water through the use of decision support systems, blockchain as well as virtual reality and augmented reality

R6.5 - Use of machine learning techniques to improve the prediction models of existing water systems

Survey: <http://allourideas.org/SDG6>

7 AFFORDABLE AND CLEAN ENERGY



R7.1 - Data compression and distributed computing technologies to reduce energy consumption in data storage and processing centers (data centers)

R7.2 - High-fidelity models for long-term prediction of renewable energy resources (wind, solar irradiation, etc.)

R7.3 - Blockchain technology for the secure management of smart electrical grids

R7.4 - Intelligent and robotic systems to reduce the inspection and maintenance costs of energy facilities

R7.5 - Blockchain to control traceability and better monitoring of financial flows for investment in clean and renewable energy in developing countries

Survey: <http://allourideas.org/SDG7>



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8 DECENT WORK AND ECONOMIC GROWTH



R8.1 - Updated education systems and fight against digital breach

R8.2 - Efficient and productive innovation for economic growth, with special emphasis on generating added value and new products and services

R8.3 - Universal access to the internet and computers as a basis for access to banking services and other credit and tax processing services

R8.4 - Ensure that raw materials for electronics and digital technologies do not come from slave labor

Survey: <http://allourideas.org/SDG8>

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



R9.1 - AI for the generation of more efficient and sustainable structural engineering solutions

R9.2 - AI to support the design of communication and transport infrastructure and networks

R9.3 - Digital transformation of the economy, through the development of Industry 4.0 and support for innovative startups

R9.4 - Smart monitoring of pollutant emissions in industry and transport

R9.5 - Increased investment in public and private R&D, generating open, sustainable and inclusive innovation systems

Survey: <http://allourideas.org/SDG9>



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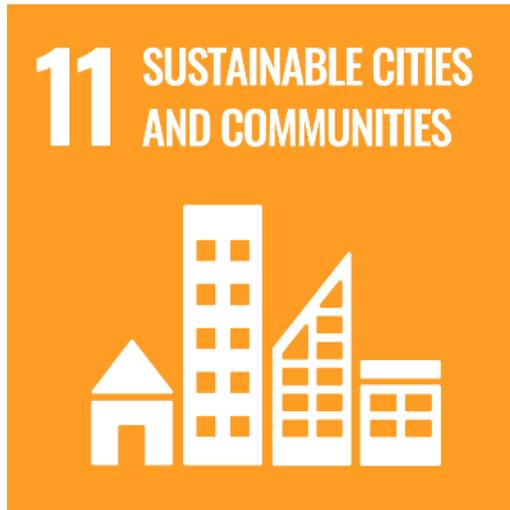
R10.1 - Personalized digital banking against the economic breach

R10.2 - Smart technologies to promote non-discriminatory citizen participation

R10.3 - Analysis of social polarization in social networks to combat discriminatory behaviors

R10.4 - Support for small and medium enterprises in digital resources for globalization and competitive advantage

Survey: <http://allourideas.org/SDG10>



R11.1 - Digital Twins of the main services of the city, to provide ubiquity to the service, better inform the citizen, and monitoring social impact

R11.2 - Virtual reality / augmented reality and mobile apps in the dissemination and inclusive use of city services

R11.3 - Unified management of urban data with Machine Learning

R11.4 - Transparency and security in commercial and tax payments through the use of blockchain

R11.5 - Intelligent action / rescue plans under the support of the IoT to support emergency situations

Survey: <http://allourideas.org/SDG11>



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12 RESPONSIBLE CONSUMPTION AND PRODUCTION



R12.1 - IoT technologies in production factories, supply networks and common places of consumption for greater sensorization of production processes and consumption habits

R12.2 - Big data and artificial intelligence on data series of production processes and consumption patterns

R12.3 - Digital twins that allow the study of sustainability and "virtual" experimentation on production processes

R12.4 - Augmented reality to inform consumers of sustainability aspects related to the products they consume

R12.5 - Decision support systems, recommender systems and blockchain to improve sustainability in production processes and greater transparency in communication between producers and consumers

Survey: <http://allourideas.org/SDG12>

13 CLIMATE ACTION



R13.1 - Improve Natural Disaster Prediction Using Advanced AI Models

R13.2 - IoT sensor technologies to allow AI to make predictions of natural disasters in real time

R13.3 - Creation of predictive models worldwide, applying pre-learned models in different areas of the world

R13.4 - AI to optimize urban traffic, thereby reducing pollution, through improvements in traffic signs

R13.5 - Augmented Reality and Conversational Agents to improve Environmental education

Survey: <http://allourideas.org/SDG13>



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R14.1 - Technologies for detection, quantification and monitoring of marine plastic debris with a wide range of action

R14.2 - Low-cost, highly reliable ocean monitoring technologies

R14.3 - Blockchain technology for the secure management of information systems and management of oceanic ecosystems

Survey: <http://allourideas.org/SDG14>



R15.1 - AI for prediction and early detection of fires using aerial images and/or sensors

R15.2 - AI for early detection of diseases in crops and reducing losses

R15.3 - AI to optimize water consumption in crops

R15.4 - Incorporation of intelligent sensors with IoT technologies for intelligent detection in real time

R15.5 - Big Data to efficiently integrate and analyze the data collected in large areas

Survey: <http://allourideas.org/SDG15>



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16 PEACE, JUSTICE AND STRONG INSTITUTIONS



R16.1 - Machine Learning as a support tool for anticipating crime incidence and improving security response

R16.2 - Safe and reliable institutions through the use of Blockchain to prevent institutional corruption, both publicly and privately

R16.3 - Combination of AI techniques with other technological solutions (drones, IoT, etc.) as integrated tools for the fight against crime

R16.4 - Self-adaptive expert systems for judicial processing as support for the integration of the judicial system for citizens

Survey: <http://allourideas.org/SDG16>

17 PARTNERSHIPS FOR THE GOALS



R17.1 - Alliances for AI and digital technologies based on ethical principles and multidisciplinary experts

R17.2 - Codes of professional practice in organizational and professional environments under the use of AI and digital technologies

R17.3 - Drive global alliances in the widespread use of economically sustainable data collection

R17.4 - Carry out government efforts to bring AI and digital technologies to the whole of society

Survey: <http://allourideas.org/SDG17>