



Italian strategy on AI and the needs from the “new normal”.

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Prof. Rita Cucchiara

Aimagelab, Dipartimento di Ingegneria Enzo Ferrari
Università degli Studi di Modena e Reggio Emilia, Italy
Director of the ELLIS Unit at UNIMORE
Director of the CINI National Lab in Artificial intelligence and Intelligent Systems



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ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is already part of our lives ...

...Beyond making our lives easier, AI is helping us to solve some of the world's biggest challenges: from treating chronic diseases or reducing fatality rates in traffic accidents to fighting climate change or anticipating cybersecurity threats....

Artificial intelligence (AI) refers to **systems** that **display intelligent behaviour** by **analysing their environment** and **taking actions** – with **some degree of autonomy** – to achieve specific goals.



Brussels, 25.4.2018
«Artificial Intelligence for Europe»

Artificial Intelligence in Italy (2017-2019)

2017: AGID (Agency for Digital Italy): the first “Task Force on AI” .

2018: AGID *white paper* on “**AI in Italy for citizen**”* .



2018: - April, The “**Artificial intelligence for Europe**” Communication to European Parliament** .

- June, institution of **National Lab CINI AIIS (Artificial Intelligence and Intelligent Systems)** endorsed by DIS-Presidency of the Ministry Council. ***

- December, “**Coordinated Plan on AI**” European Commission.



2019: - January, “High-level working group of AI” from Ministry of Economic Development (MISE).

- June, first document on “**Proposals for an Italian Strategy on AI**”****;.



* <https://ia.italia.it/assets/librobianco.pdf>

** <https://ec.europa.eu/digital-single-market/en/news/communication-artificial-intelligence-europe>

*** <https://www.sicurezzanazionale.gov.it/sisr.nsf/wp-content/uploads/2019/02/Relazione-2018.pdf> “Relazione sulla Politica dell’Informazione per la Sicurezza “ PCM –CPM 2018

****https://www.mise.gov.it/images/stories/documenti/Proposte_per_una_Strategia_italiana_AI.pdf

Artificial Intelligence in Italy 2020



- 2020: - February, “**White Paper on Artificial intelligence - A European approach to excellence and trust**”*
- Spring, *Italian Covid-lockdown*: Technologies Task Forces from Ministry of Innovation and Digital Transformation (MID)
 - July: Presentation of the Document “**AI for Future Italy**”** CINI Lab AIIS.
 - September, Presentation of “**Strategia Nazionale per l’Intelligenza Artificiale**” Ministry of Economic Development (MISE) **
 - September, first meeting on **Global Partnership on AI** from OECD.AI (supported by MID)
 - October- Launch of **National Phd Program on Artificial Intelligence** (MUR); completion of the “**Piano Nazionale delle Ricerche**” PNR 2021-202t (MUR)

*https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf

**<https://www.conorzio-cini.it/index.php/it/component/attachments/download/1095>

*** https://www.mise.gov.it/images/stories/documenti/Strategia_Nazionale_AI_2020.pdf

****<https://oecd.ai/wonk/contributors/responsible-ai-working-group-gpai>



Next Artificial Intelligence in Italy and world



2021-22:

- **“AI and Cybersec for Health”** a join-program from Italy, Israel and EAU open to all countries for EXPO Dubai 2020;
- Activities in the Italian presidency year of G20;
- Opening the Horizon Europe program (Cluster IV. Digital.-industry and Space”);
- Opening the Italian activities of PNR2021-2027;



**Programma Nazionale per
la Ricerca 2021-2027**
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The «National Strategy on AI» (MISE)

Four principles

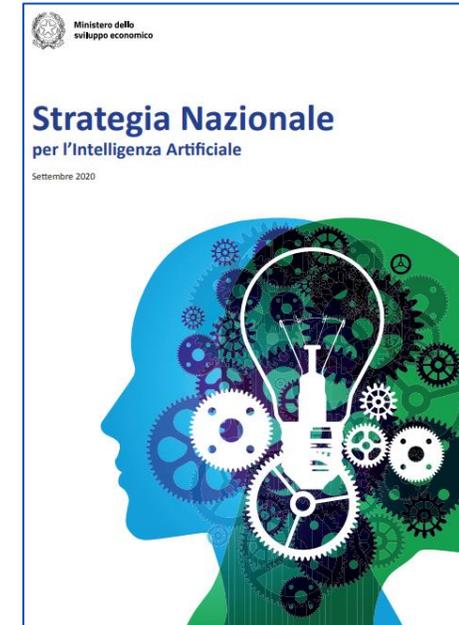
1. Connection in the European «Coordinated Plan of AI»
2. Connection with OECD, G7 and G20 strategies
3. Foundations on human-centric, trustworthy and sustainable AI
4. A public-private partnership for Italian AI

Seven priorities in AI applications

1. Industry and manufacturing
2. Agri-food
3. Culture and Tourism
4. Health and wellbeing
5. Environment, infrastructures
6. Smart Cities
7. Public Administration

Actions

- AI for competitiveness of industries and SMEs
- AI for a more modern Public Administration
- AI for empowered and aware citizen
- New Competences in school, university and life-long learning
- Data initiatives
- A new governance for AI



The «National research Plan 2021-2027» (MUR)



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The big field « Digital, industry and Aerospace»

1. The digital transformation
2. HPC and Big Data
3. Artificial intelligence
4. Robotics
5. Quantum Computing
6. Innovation for Manufacturing Industry
7. Aerospace

Six themes in Artificial intelligence

1. Ai for AI: Foundational Research
2. Human-centric AI
3. AI for health
4. AI for society
5. AI for Environment and infrastructure
6. Ai for industrial production

Some proposals:

- A large Medical AI project
- Human digital twins
- Human-AI Interaction

The Emilia Romagna challenge: AI for a human-centric industrial economy

Industrial Economy:

- Le largest manufacture and automotive area in Italy
- Industries of pharma, textile, ceramic, fashion
- Food industries
- Tourism and Cultural-Creative industries
- A Growing landscape for AI and IT SMEs/start-ups



Human resources:

- 4 universities with AI Curricula/Centers
- 10 National/international Research Centers
- The biggest HPC center of Italy
- A large Technology-oriented human power

The Bologna Tecnopolo – science park
A European, National and Regional investment for Digital Economy and BD



The Modena Tecnopolo - The Center of Ai and Vision (ELLIS Unit & AI Academy by ER)



Italy, AI and the “new normal”?

Human-Centric AI
for a Human-centric society
and a Human –centric Industrial Economy

AI and Machine Learning
for a new human-centric
Industrial Production

AI services and solutions
for education, and «new» cultural
experiences

AI, big Data and HPC
for scientific/ medicine and
social/city data understanding

AI and Machine Learning solutions
for Health and «well»/«safe»being

AI new services
for Public Administration
challenges



Ready for working together in AI
for science, industry and society
for humans and for health.

Contacts:

Prof. Rita Cucchiara

***AlmageLab, Dipartimento di Ingegneria Enzo Ferrari
Università di Modena e Reggio Emilia
via Vivarelli 11 41125 Modena, Italy
Email rita.cucchiara@unimore.it***

***Direttore del CINI National Lab in
Artificial Intelligence and Intelligent systems AIIS
CINI - Consorzio Interuniversitario Nazionale per l'Informatica
Via Ariosto 25, 00185 Roma
Email direttore.aiis@consorzio-cini.it***

Thanks.