




ENCJ

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# Outline

- AI in the EU
- AI in Italy
- Outstanding issues



**Artificial Intelligence (AI)** refers to any machine or algorithm that is capable of observing its environment, learning and, based on the knowledge and experience gained, taking intelligence action or proposing decisions. There are many different technologies that fall under this broad AI definition. At the moment, “Machine Learning” techniques are the most widely used.





The methodological developments in AI date back more than 50 years but the recent breakthrough has come from advances in computing power, availability of data, and complexity of the algorithms.

The many applications of AI are entering **into our everyday lives**, from filtering spam, to machine translations, image recognition and music generation, and are increasingly used in industry, government and commerce.

We are probably only **at the beginning of this process** because the development of ubiquitous sensor networks, and the IoT, will increase exponentially the sensing capabilities of AI, the volumes of data available to train the algorithms and the reach of AI through decisions and actions.


The **opportunities** are many, and in some cases **not yet foreseen**, but so are the **challenges**.

Many **national strategies and programme** (*“Villani Report 2018”* in France; *“Robotics and Artificial Intelligence”* Report 2016 in United Kingdom)

**Cooperation** among EU member States and the European Commission (on April 2018, the EU Member States and Norway signed a *“Declaration of cooperation on Artificial Intelligence”* in which they agreed to work together on the most important issues raised by AI, from ensuring Europe’s competitiveness in the research and deployment of AI to dealing with social, economic, ethical and legal questions).

Several member States (Finland, beyond France and United Kingdom) already have **AI strategies in place or are in the process of adopting them.**





Most national strategies have **similar aims and objectives**: embracing AI to become a leading country in the field, supporting innovation and business, promoting the use of AI in the public sector, establishing one or more national centers of excellence and developing strategies to promote the sharing and use of data more widely between the public and private sectors. They also focus on applications aimed at modernizing public administrations, as well as specific sectors as health.



Communication from the European Commission to the Parliament and the Council on Artificial Intelligence for Europe (2018) sets out a EU initiative on AI, which aims to:

- promote the EU's technological and industrial capacity and AI uptake across the economy
- prepare for socio-economic changes brought about by AI
- ensure an appropriate ethical and legal framework, based on the Union's values and in line with the Charter of Fundamental Rights of the EU.






## Council of Europe initiatives

Recommendation (2017) of the Parliamentary Assembly about Technological convergence, artificial intelligence and human rights

European Ethical Charter on the use of artificial intelligence in judicial systems and their environment (2018),





Importance of the *Charter*, the first European instrument to set out (five) methodological principles that apply to the automated processing of judicial decisions and data based on AI techniques.

Developed by the Council of Europe Commission for the efficiency of justice (**CEPEJ**), it is aimed at private companies (start-ups active on the market of new technologies applied to legal services), public actors in charge of designing and deploying AI tools and services in this field, public decision-makers in charge of the legislative or regulatory framework, as well as legal professionals.

The Ethical Charter is already a reference point for applications of AI in the judicial sector

## Italy

For the time being judges in Italy do not make any practical and daily use of predictive software or AI tools

However, AI tools would likely meet the needs of judges:

AI offers a new tool for calculating scales (divorce, dismissal, compensation for personal injury etc.) through a probabilistic or actuarial approach, offering quick and reliable results

AI might contribute to the efficiency and quality of justice in terms of duration of court cases and uniformity of case law



## MoCAM system

Software developed in 2007 for calculating scales in family cases: amount of child support in cases of separation, divorce or rupture of a *de facto* union, contribution due in favor of the spouse

The software is mainly directed to citizens as a guidance concerning their rights in case of nuptial crisis

## Modello per il Calcolo dell' Assegno di Mantenimento nei casi di separazione e divorzio

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### Cosa è MoCAM?

MoCAM è un modello corredato di un software tramite il quale è possibile calcolare l'ammontare dell'assegno di mantenimento per i figli nei casi di separazione, divorzio o rottura di una unione di fatto e, quando ne esistano i presupposti, del contributo a favore del coniuge.

I risultati del modello, relativi a un caso specifico, sono presentati sotto forma di una relazione che può essere utilizzata come perizia nell'ambito di procedimenti giudiziali o come base per definire gli accordi di un procedimento consensuale ([per saperne di più](#)) .

### Come si accede al servizio di MoCAM online?

Occorre registrarsi al sito ([per registrarsi clicca qui](#)). Un utente registrato può acquistare "crediti" che gli consentono, dopo aver inserito i dati, di ottenere on-line una relazione completa ([vedi esempi](#)), contenente il riepilogo delle informazioni immesse ed il calcolo dei relativi assegni di mantenimento. Per l'immissione dei dati, l'invio automatico della relazione e il pagamento dei crediti, il servizio è attivo 24 ore su 24, 365 giorni l'anno. Per sapere quali dati vengono richiesti all'utente per il calcolo [clicca qui](#) o consulta il [video-guida per l'inserimento dei dati](#).

### Quanto costa?

Per conoscere il costo del servizio [clicca qui](#) o consulta il [video-guida registrazione e acquisto crediti](#).

### MoCAM-Calculator in abbonamento per professionisti

Da febbraio 2013 è possibile accedere al nuovo servizio MoCAM-Calculator in abbonamento. Col nuovo software il professionista potrà ottenere il calcolo dell'importo dell'assegno in corrispondenza di **vari scenari che possono essere testati nella stessa seduta di lavoro**. Tale software, identico alla versione dedicata ai magistrati, può essere utilmente consultato, eventualmente insieme al cliente, per considerare gli effetti che differenti valori delle variabili immesse hanno sull'assegno. Nell'abbonamento è compresa la produzione di 15 relazioni ([per saperne di più](#)).


### MoCAM offline

Per l'uso di MoCAM online sono previste alcune restrizioni sulle variabili ([clicca qui per saperne di più](#)). Nei casi in cui MoCAM online non è applicabile o se si preferisce non effettuare direttamente il data-entry, si può richiedere, anche senza registrarsi, una relazione contenente il calcolo degli assegni di mantenimento inviando i dati per posta elettronica a: [info@mocam.net](mailto:info@mocam.net). per sapere quali dati sono necessari [clicca qui](#). Si riceverà in seguito un preventivo di costo (in base alla complessità del caso).

### MoCAM gratuito per i magistrati

È attiva un'area riservata a magistrati per l'uso gratuito del software. Per ottenere username e password i magistrati devono contattare gli amministratori di MoCAM scrivendo a [info@mocam.net](mailto:info@mocam.net) .





The system requires  
Registration on the portal  
Payment of a fee  
Provision of data

Algorithm for calculating the scales is (pre) defined by the programmer

No machine learning activity, no big data analytics, no case law automatic research

L'utente che voglia ottenere il calcolo dell'assegno di mantenimento riferito ad un caso specifico deve fornire una serie di informazioni che servono come input per il modello. Prima di procedere all'immissione dei dati, accertarsi di avere tutte le seguenti informazioni (le maschere di immissione dati contengono dettagliate spiegazioni sulle informazioni richieste)

## DATI ANAGRAFICI

- Zona di residenza della famiglia (Nord, Centro, Sud).
- Anno di nascita dei due coniugi (o conviventi).
- Anno di matrimonio (se coniugati).
- Numero di figli.
- Anno di nascita dei figli (se presenti).

## REDDITO DEI CONIUGI

- Reddito annuale di Lui\* (con la specifica se netto da imposte o lordo).
- Reddito annuale di Lei\* (con la specifica se netto da imposte o lordo).

\*La cifra da indicare deve comprendere la somma di tutti i redditi da lavoro (sia dipendente che autonomo) e tutti i redditi da capitale, compresi interessi su titoli, affitti di immobili, partecipazioni societarie, ecc..

## ESPOSIZIONI DEBITORIE

- Indicare eventuali esposizioni debitorie derivanti da scioglimento di precedenti unioni (assegni per mantenimento di figli nati da precedenti unioni, assegni di mantenimento di ex coniugi ecc.) a carico delle parti.
- Indicare eventuali spese sistematiche necessarie per fronteggiare patologie o infermità.





Use of Mocam by the Court of Florence both for facilitating dispute settlements and for calculating scales

### Shortcomings of the system

Not tailored in order to address the peculiarities of specific cases

Example: the algorithm considers the time spent by children with each parent in terms of quantity only, without taking into consideration the quality of tasks performed by each parent during that relevant period




Outcome depending on the formula defined by the programmer

No consideration of case-law evolution

Need of a case by case balancing test of the interests to be taken into account

Supreme Court (Corte di Cassazione): scales for the allowances due to spouses and children to be determined through an overall assessment off all relevant circumstances and a balancing of the legal principles, not on the base of a mere mathematical criteria





Initiatives of certain Italian Courts, aimed to providing citizens with guidance on possible duration and probable outcomes of judicial disputes


Transparency and predictability tools may encourage out-of-court settlements and limit un-necessary recourse to justice



### Progetto prevedibilità delle decisioni

Scarica il  ["Prevedibilità delle decisioni" - Schede tematiche della giurisprudenza consolidata della terza sezione civile della Corte](#)

Corte d'Appello Prima sezione civile	Corte d'Appello Seconda sezione civile	Corte d'Appello Terza sezione civile
	 <a href="#">art. 2932 c.c.</a>  <a href="#">intermediazione finanziaria</a>  <a href="#">responsabilità medica e onere della prova</a>  <a href="#">onere della prova in contratto di conto corrente</a>	 <a href="#">2043 e 2051 P.A.</a>  <a href="#">art. 283 c.p.c.</a>  <a href="#">danni causati da fauna selvatica</a>  <a href="#">danni condotte idrico fognanti</a>  <a href="#">danni da emotrasfusione</a>  <a href="#">interessi compensativi</a>  <a href="#">medici specializzandi</a>  <a href="#">Danni da diffamazione</a>  <a href="#">danno patrimoniale</a>  <a href="#">Responsabilità per danni causati da animali randagi</a>



Provision to any interested subject, through the Court's web site, of consolidated case law reports with respect to given matters, in order to facilitate predictability of the outcome of potential judicial disputes on such matters

Reports prepared by trainees under supervision of Court Judges

Reports useful for judges and for citizens in terms of transparency and predictability

### Shortcomings

Peculiarities of each case to be taken into account

Need of constant updates with respect to case-law evolution (including case law of other Courts, Supreme Court and international Courts)





AI systems might in the future help to overcome some of the above shortcomings

For the time being, the introduction in the Italian judicial system of AI predictive tools seems problematic



Very advanced stage of digitalization in Italian civil court proceedings

The Civil Telematic Process is a project initiated by the Ministry of Justice aimed at improving the quality of judicial services in the civil law sector. A new technological architecture enables online remote execution of operations (such as document filing, transmission of communications and notifications, consultation of the proceedings status using the registry held by the chancery, consultation of the files and case law), which previously were only available by physically visiting the Court chancery

Complete data base of Supreme Court decisions available

however

Criminal Telematic Process not ready

Data base of ordinary court decisions not available



## Legal issues

Article 102 Italian Constitution: Judicial proceedings are exercised by ordinary magistrates empowered and regulated by the provisions concerning the Judiciary

Article 6 ECHR: right to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law

Art. 22 GDPR: The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her

Italian Constitutional Court, decision 187/2018: compensation for unlawful dismissal automatically (pre) determined by the law in relation to length of service alone is unconstitutional

In the opinion of the Constitutional Court, the calculation of the amount of damages due to unlawfully dismissed workers must be made by a judge taking into account many criteria, such as number of employees, size of the business, conduct and conditions of the parties etc.

Principle of judge's self-determination





principles of the Ethical Charter on the Use of Artificial Intelligence  
in Judicial Systems to be guaranteed

Principle of respect for fundamental rights (design and  
implementation of AI tools and services to be compatible with  
fundamental rights)

Principle of non-discrimination

Principle of quality and security

Principle “under user control” (users as informed actors and in  
control of the choices made)

Principle of transparency, impartiality and fairness: make data  
processing methods accessible and understandable, authorise  
external audits



automatic decisions making or scale definition require transparency on the criteria used by the algorithm

TAR Lazio, sez. III bis, sent. 14 febbraio 2017, n. 3769: the public administration may use softwares for the evaluation of applicants to a given position, provided that each interested party is granted full access to the logic followed by the algorithm

AI algorithms based on machine learning methods as a “black box”: we can access the inputs and outputs, but do not understand fully what happens in-between, and how certain outputs, including decisions and actions, are derived





## Final remarks

widespread acknowledgement that AI might contribute to the efficiency and quality of justice

Technical and legal issues to be addressed