ACHILLES

HUMAN-CENTRED MACHINE LEARNING:
LIGHTER, CLEARER, SAFER

Navigating sensitive personal data in AI under the GDPR: Legal perspectives on unintended processing

ACHILLES research examines GDPR safeguards for unintended processing of sensitive data in AI

The Horizon Europe-funded ACHILLES project highlights new legal research from KU Leuven's Centre for IT & IP Law (CiTiP), published on 11 September 2026 by researcher Julie Mannekens. The article examines a practical challenge for AI developers and deployers: large-scale training and operation may unintentionally involve special categories of personal data, even where such processing is neither intended nor necessary.

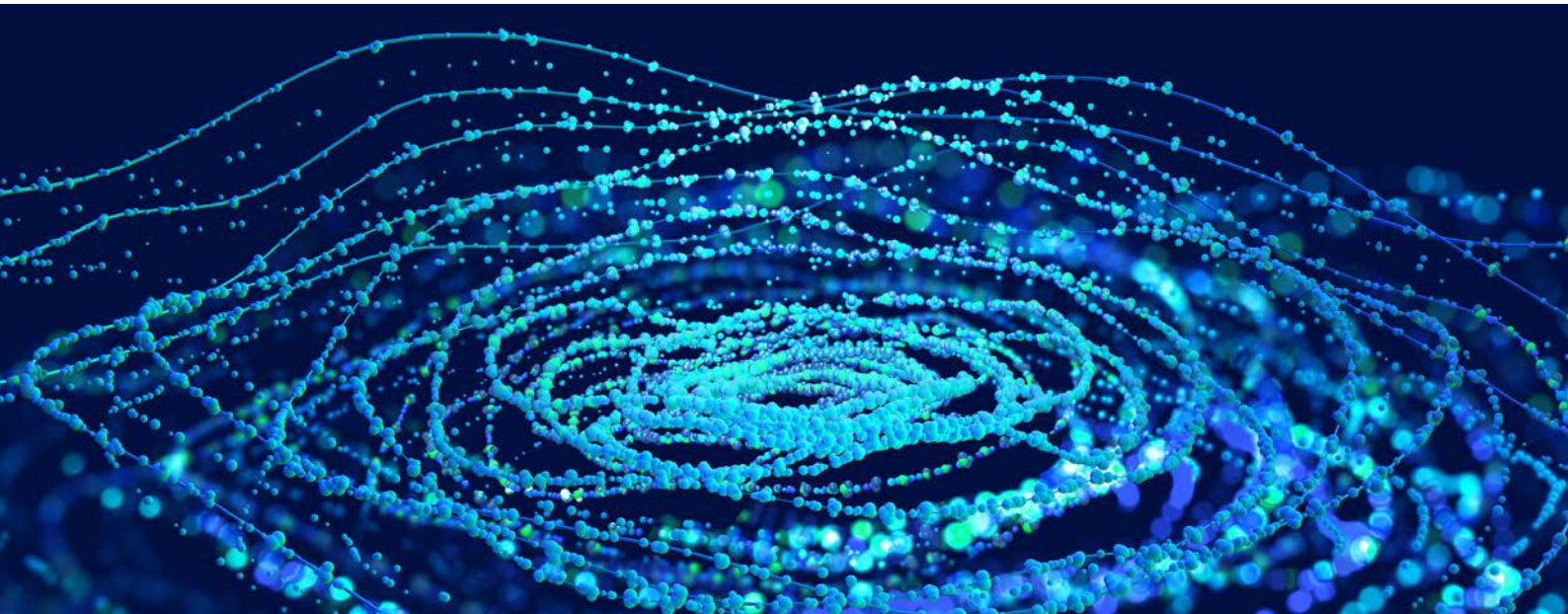
Under the General Data Protection Regulation (GDPR), processing these categories of data is generally prohibited unless an exception under Article 9(2) applies. The research explores how this framework should be interpreted where sensitive data are processed incidentally, and why preventive safeguards and appropriate responses are essential.

Key Insights:
Two Legal Routes and Practical Safeguards

Article 9(1) GDPR – interpreting the scope of the prohibition:
The article examines whether residual, unintended processing should fall within Article 9(1) when controllers have taken appropriate measures to prevent the collection, inference or use of sensitive data. It draws on guidance from European data protection authorities and relevant case law, while presenting this interpretation as the author's legal argument rather than settled law.

Article 9(2) GDPR – the Digital Omnibus proposal:
The article contrasts this approach with a proposed new exception for certain processing in AI development and operation. The proposal would require safeguards to prevent unintended processing and measures to delete such data or, in specified circumstances, prevent their use or disclosure. This is a legislative proposal, not an adopted GDPR exception.

Prevention, detection and remediation:
Technical and organisational measures remain central to the discussion, including steps to minimise incidental collection, detect sensitive information and address data found in AI systems. The research underscores the importance of documenting safeguards and assessing the actual risks of processing.



Research Perspective

Julie Mannekens, researcher at KU Leuven CiTiP, argues for a nuanced, contextual interpretation of Article 9(1) GDPR as a preferable route to addressing residual unintended processing, while recognising that the Digital Omnibus proposal pursues a similar practical objective through a different legal mechanism. This position reflects the author's analysis and should not be read as an official interpretation of the GDPR.

Relevance for ACHILLES

The article draws on findings disseminated through ACHILLES and contributes to the project's work on trustworthy, privacy-aware and human-centred AI. By clarifying the regulatory questions that arise when AI systems encounter sensitive data unintentionally, the research informs discussion of responsible development practices and compliance-oriented approaches. It does not claim that a particular ACHILLES tool has already resolved these legal challenges.

Next Steps

ACHILLES will continue to disseminate legal and technical insights on trustworthy AI, connecting research on data protection and regulatory compliance with the project's wider scientific work and stakeholder dialogue. Interested readers are invited to consult the original analysis and follow subsequent project updates.

More Information



Original article (11 September 2026):
https://www.law.kuleuven.be/citip/blog/addressing-unintended-processing-of-special-categories-of-personal-data-in-ai-between-article-91-and-article-92-gdpr/

Consortium

ARCADA

AXIOLOGIC

CTT-INNOVATIONS

Fraunhofer PORTUGAL

Fraunhofer HHI

IDnow.

inesc id lisboa

KU LEUVEN CiTiP CENTRE FOR IT & IP LAW

PNO INNOVATION

INCM

Instituto de Sistemas e Robótica | LISBOA

IdISSC INSTITUTO de INVESTIGACIÓN SANITARIA Hospital Clínico San Carlos

Hospital Clínico San Carlos

UNIVERSIDADE DA CORUÑA

eticas

CUOMO IT Consulting GmbH

www.achilles-project.eu

FOLLOW US

www.linkedin.com/company/achilles-project

ACHILLES

HUMAN-CENTRED MACHINE LEARNING: LIGHTER, CLEARER, SAFER

Funded by the European Union

This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101189689.