15 U.S. Code § 278h-1

Standards for artificial intelligence

(a) Mission

The Institute shall—

(1) advance collaborative frameworks, standards, guidelines, and associated methods and techniques for artificial intelligence;

(2) support the development of a risk-mitigation framework for deploying artificial intelligence systems;

(3) support the development of technical standards and guidelines that promote trustworthy artificial intelligence systems; and

(4) support the development of technical standards and guidelines by which to test for bias in artificial intelligence training data and applications.

(b) Supporting activities

The Director of the National Institute of Standards and Technology may—

(1) support measurement research and development of best practices and voluntary standards for trustworthy artificial intelligence systems, which may include—

(A) privacy and security, including for datasets used to train or test artificial intelligence systems and software and hardware used in artificial intelligence systems;

(B) advanced computer chips and hardware designed for artificial intelligence systems;

(C) data management and techniques to increase the usability of data, including strategies to systematically clean, label, and standardize data into forms useful for training artificial intelligence systems and the use of common, open licenses;

(D) safety and robustness of artificial intelligence systems, including assurance, verification, validation, security, control, and the ability for artificial intelligence systems to withstand unexpected inputs and adversarial attacks;

(E) auditing mechanisms and benchmarks for accuracy, transparency, verifiability, and safety assurance for artificial intelligence systems;

(F) applications of machine learning and artificial intelligence systems to improve other scientific fields and engineering;

(G) model documentation, including performance metrics and constraints, measures of fairness, training and testing processes, and results;

(H) system documentation, including connections and dependences within and between systems, and complications that may arise from such connections; and

(I) all other areas deemed by the Director to be critical to the development and deployment of trustworthy artificial intelligence;

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