SFIA levels describe increasing responsibility, accountability and impact

Machine learning: Level 3

Machine learning: Level 4

Machine learning: Level 5

Levels of responsibility – the same for all SFIA skills

Level 3 - Apply

Essence of the level: Performs varied tasks, sometimes complex and non-routine, using standard methods and procedures. Works under general direction, exercises discretion, and manages own work within deadlines. Proactively enhances skills and impact in the workplace.

Level 4 - Enable

Essence of the level: Performs diverse complex activities, supports and guides others, delegates tasks when appropriate, works autonomously under general direction, and contributes expertise to deliver team objectives.

Level 5 - Ensure, advise

Essence of the level: Provides authoritative guidance in their field and works under broad direction. Accountable for delivering significant work outcomes, from analysis through execution to evaluation.

SFIA skill definition – unique for each skill – but all aligned to the generic levels

Applies established machine learning techniques and algorithms to solve business problems.

Selects and prepares data for model training and evaluation.

Trains, optimises and validates machine learning models using standard tools and frameworks.

Deploys models into production and monitors their performance. Communicates results and limitations to stakeholders.

Assesses the suitability of machine learning and designs and develops solutions for a range of business problems.

Selects and applies appropriate techniques and algorithms based on data characteristics and business requirements. Provides guidance to others.

Engineers features and optimises model performance. Implements algorithms and contributes to development, evaluation, monitoring and deployment. Applies industry-specific rules and guidelines, anticipating risks and implications.

Leads the development and implementation of machine learning solutions for complex, high-impact business problems.

Architects end-to-end machine learning pipelines and systems, incorporating MLOps practices. Evaluates and selects tools, frameworks and infrastructure for machine learning projects.

Establishes practices and standards for machine learning development and operations. Provides expert advice and guidance on machine learning techniques and applications.

Collaborates with stakeholders to align machine learning initiatives with organisational goals.

SFIA levels describe increasing responsibility, accountability and impact

Artificial intelligence (AI) and data ethics: Level 4

Artificial intelligence (AI) and data ethics: Level 5

Artificial intelligence (AI) and data ethics: Level 6

Levels of responsibility – the same for all SFIA skills

Level 4 - Enable

Essence of the level: Performs diverse complex activities, supports and guides others, delegates tasks when appropriate, works autonomously under general direction, and contributes expertise to deliver team objectives.

Level 5 - Ensure, advise

Essence of the level: Provides authoritative guidance in their field and works under broad direction. Accountable for delivering significant work outcomes, from analysis through execution to evaluation.

Level 6 - Initiate, influence

Essence of the level: Has significant organisational influence, makes high-level decisions, shapes policies, demonstrates leadership, promotes organisational collaboration, and accepts accountability in key areas.

SFIA skill definition – unique for each skill – but all aligned to the generic levels

Engages stakeholders to communicate ethical considerations and influence design decisions.

Conducts detailed impact assessments and makes recommendations. Manages ethical reviews to ensure compliance with standards.

Evaluates risks and proposes measures to address ethical concerns. Leads discussions with stakeholders on ethical issues.

Designs and executes ethical impact assessments. Prepares reports based on audit findings.

Provides expert advice to integrate ethics into Al and data projects and programmes.

Oversees governance and assurance activities. Reviews and approves impact assessments and audits.

Promotes awareness of ethical principles and their application across the organisation.

Contributes to the development of policy, standards and guidelines related to AI and data ethics.

Sets direction for ethics in AI and data initiatives.

Defines governance processes to ensure compliance with ethical standards. Engages with industry bodies and experts to develop and drive industry recommended practices.

Develops and implements strategic ethical frameworks. Leads high-level reviews and decision-making processes.

Allocates resources to support the organisation's commitment to ethical practices. Ensures the organisation has resources and skills for ethical assurance.