





Artificial intelligence applied researcher

Proficiency level

-  New Gen AI skills
-  Transferrable skills at the same proficiency level
-  New skills
-  Transferrable skills at a higher proficiency level¹

Skills Framework track	Data and artificial intelligence	Job function	Engineering and tech.	Job family	Business analyst
Sub-sectors	Retail banking, corporate banking, investment banking, private banking and wealth management, asset management, insurance	Expected augmentation by Gen AI	Do more: Gen AI could automate the evaluation and preprocessing of data, assist in the generation of new data extraction methods, and expedite preliminary patentability analyses. Gen AI tools can also streamline the design and testing of AI models, synthesize research insights to uncover new topics and use cases, and assist in documenting and presenting complex research outcomes		

Key tasks that can benefit from Gen AI

Critical work functions	Key tasks
Manage data collection and preparation	Ensure quality and suitability of data for AI research and development
	Assess suitability of data extraction methods for research and development
	Explore new data sources and techniques to enhance research and development outcomes
Manage IP processes and procedures	Perform preliminary analysis on patentability of AI solutions
	Assist in the creation, application, and assignment of IP legal rights for AI solutions
	Assist in IP due diligence and landscape analysis to determine new IP for AI solutions
Build AI models	Design experiments to test AI models
	Synthesize insights across AI research projects to identify new research topics
	Provide guidance to the team on developing new AI models using suitable learning and modeling methods
	Lead the analysis, simulations, and relevant testing procedures of AI models
Conduct AI research and development	Lead prototype development of AI solutions for large-scale deployment
	Review AI literature to identify emerging trends, methods, technologies, and best practices
	Synthesize research to identify potential use cases and new research and development activities
	Evaluate AI research methodologies and processes to identify areas for improvement
	Document and present AI research and development outcomes to senior management and business stakeholders at public forums

New Gen AI skills

Prompt design	2	Gen AI principles and applications	2	Ethical and responsible Gen AI adoption	2
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1. Transferrable skills with an increase in one level of proficiency is considered easier to acquire than transferable skills with multiple levels of increase in proficiency, followed by net new additional skills. Depending on job redesign for the financial institution, the financial institution will have to pick select skills to reskill employees on, via a combination of on-the-job training and existing courses.

Source: SkillsFuture Skills Framework