

Tech practitioner: Skills and proficiencies (1/2)*





Skill name and description	Proficiency level					
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen Al models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen Al models.	1	Understands basic prompt design concepts and techniques, and can explain the importance of prompt design in Gen Al	Craft prompts using best practices, such as understanding when to use zero shot, one shot, or domain-based prompting techniques, to generate specific outputs. Design of prompts should also incorporate basic anonymization techniques, such as data masking	4	5	6
Application of Gen Al principles: Understanding and applying the concepts, frameworks, applications, and implications of Gen Al models.		Understands the underlying concepts and theoretical frameworks of Gen Al	Implements basic Gen AI to support everyday tasks (e.g., administrative and research), and optimizes prompts to increase the quality of outputs			
Gen Al model selection: Expertly evaluating and selecting the most appropriate Gen Al model for each use case This involves analyzing published metrics, conducting user experiments, and considering available external models.	Recognizes basic Gen AI models and performs guided selection based on simple metrics. Can suggest minor adjustments to selections	Understands and can apply basic criteria to select Gen Al models for straightforward use cases. Proposes minor enhancements based on user feedback	Identifies and selects appropriate Gen Al models for various use cases through assessment of key selection parameters, such as significance of dataset quality and model training (including data management), and model parameters	Evaluates and compares Gen Al models using published metrics and user experiments. Addresses non-routine selection challenges and manages unpredictable tasks	Critically analyzes advanced Gen Al models and optimizes selection processes for complex use cases. Develops innovative solutions to enhance model performance	Synthesizes interdisciplinary knowledge to redefine Gen Al model selection practices
Gen Al model evaluation: Assessing the quality, performance, and potential impact of chosen Gen Al models across various financial domains and applications is critical for ensuring successful deployment.	Executes basic, predefined evaluations for Gen Al models, focusing on specific tasks. Recognizes straightforward performance metrics	Understands qualitative evaluation methods, user feedback analysis, while identifying ethical considerations in the model's generated outputs to propose initial improvements based evaluation findings	Designs and carries out custom evaluations of Gen AI models. Collaborates to analyze results, enhance model performance, and communicate evaluation results	Develops comprehensive evaluation frameworks for Gen Al models across different domains. Addresses complex evaluation challenges and manages diverse application scenarios	Innovates and implements advanced evaluation techniques for Gen Al models. Critically assesses performance and impact, providing insights for optimization	Develops and can apply novel evaluation methodologies that shape Gen AI evaluation best practices
Gen Al application development and deployment: Designing and building applications around Gen Al models, integrating the language processing capabilities into specific use cases and domains, and troubleshooting Al tools.	Constructs basic applications utilizing Gen AI for specific tasks. Follows predefined guidelines and basic integration steps	Develops applications that incorporate Gen AI models that addresses straightforward use cases, and understands basic software troubleshooting steps, such as interpretation of help resources and documentation. Implements basic controls and understands fundamental model risks	Creates sophisticated applications by integrating multiple Gen AI models. Implements and manages appropriate safeguards to mitigate model risks	Designs and deploys advanced Gen AI applications tailored to complex use cases. Evaluates and can apply a range of controls and risk management techniques. Handles unpredictable deployment scenarios effectively	Architects intricate Gen AI -driven applications using innovative techniques for context augmentation and robust guardrails. Drives optimization, such as automation of troubleshooting tasks through custom scripts or tools, and ensures high-performance deployment	Leads the development of cutting- edge Gen AI applications that push the boundaries of current capabilities. Conducts pioneering research to advance the filed of Gen AI-powered applications
Gen Al model development and fine-tuning: Leveraging in-dept learning expertise and statistical inference knowledge, tech practitioners are responsible for designing, implementing, training, and evaluating Gen Al models. This includes rigorous performance assessment and understanding their potential impact across various financial applications.	Implements Gen AI models using established architectures. Conducts basic evaluations to assess their effectiveness on simple tasks	Develops Gen AI models by adapting existing architectures to specific use cases. Applies data pre-processing, de-duplication, and cleaning techniques for data manipulation to train AI models, and identifies and troubleshoots basic performance issues	Creates custom deep learning architectures, such as developing data pipelines to create fine tuning datasets, to support specific tasks and applications. Analyzes model performance and implements debugging strategies to resolve complex issues	Designs and fine-tunes advanced Gen AI models for diverse applications. Optimizes model performance through comprehensive evaluation techniques and addresses ethical considerations	Innovates novel Gen AI architectures and algorithms. Enhances model performance through advanced optimization techniques while effectively managing risks and ethical concerns	Pioneers industry-leading Gen Al model designs and algorithms. Leads research efforts to push the boundaries of the field, setting new standards for performance, safety, and ethical considerations in Gen Al

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Generative AI Jobs Transformation Map – A guide for the financial sector in Singapore

Tech practitioner: Skills and proficiencies (2/2)*





Skill name and description

Proficiency level

Responsible AI and Gen AI practices:

Integrating and ensuring compliance of ethical principles in AI projects. Driving framework creation for responsible Al development.

Applies established ethical guidelines to AI development projects, ensuring alignment with common ethical standards and addressing potential ethical issues

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Understand differences across Al systems based on common ethical concerns surrounding intellectual property, data privacy, and environmental impact considerations, and draft guidelines for ethical AI usage



Integrates comprehensive ethical considerations into Al development processes. Evaluates the implications of AI systems and implements strategies to mitigate ethical risks

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Designs and enforces robust ethical frameworks for AI use across various projects. Critically assesses existing guidelines and recommends improvements for enhanced ethical compliance



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for responsible AI usage, incorporating diverse ethical perspectives and regulatory requirements. Leads efforts to refine ethical standards and practices in AI development



Establishes thought-leading ethical frameworks for AI and Gen AI. Conducts in-depth evaluations of ethical guidelines and drives the evolution of responsible Al practices at a strategic level

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Gen AI models technical aspects of security and ethics:

Ensuring AI models and systems are secure and ethically sound. from development through deployment and operation.

Grasps the foundational principles of AI model security and basic testing procedures. Understands initial concepts of Al guardrails and their importance

Applies basic AI security measures and configures guardrails within Al systems. Monitors systems to ensure compliance with established security protocols

Implements comprehensive AI security strategies and configure advanced guardrails. Conducts regular audits and compliance checks to maintain ethical standards

Develops sophisticated security protocols tailored to organizational needs. Refines and enhances AI guardrails to address emerging threats and ethical considerations

Leads the creation and implementation of advanced security measures and trust initiatives. Oversees the continuous improvement of AI guardrails and ensures robust monitoring for ethical compliance

Directs organizational efforts in establishing and maintaining high standards for AI security and ethics. Leads red team exercises to identify vulnerabilities and enhance trust and safety protocols

Prompt engineering:

Being adept at creating nuanced and strategic prompts that optimize AI model performance. This involves mastering various methodologies for crafting innovative and effective prompts to fully leverage the capabilities of Gen Al.

Understands the basic principles of crafting prompts for AI models. Creates simple prompts to generate clear outputs

Shapes and refines prompts to effectively produce specific outputs. Experiments with different approaches to improve prompt effectiveness

Develops more sophisticated prompts that consider context and desired outcomes. Adjusts strategies to enhance the quality and relevance of model responses

Crafts nuanced and strategic prompts tailored to complex tasks. Utilizes various methodologies to optimize AI model performance and achieve desired results

Leads efforts in creating innovative and highly effective prompts. Continuously refines prompt strategies to improve model performance and adapt to new challenges

Oversees the development and implementation of advanced prompt engineering techniques within the organization. Mentors team members on best practices and ensures the alignment of prompt strategies with organizational goals

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Tech practitioner: Knowledge (1/2)*





Skill name and description	Proficiency level					
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen AI models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen AI models.	1	2 ••••• Concept of prompt design	Techniques in prompt construction. Impact of prompts on AI outputs, recognizing potential areas for improvements. Principles of how prompts shape AI-generated content	4	5	6
Application of Gen Al principles: Understanding and applying the concepts, frameworks, applications, and implications of Gen Al models.		Gen AI as a subset of AI focusing on content creation. Fundamental purpose of Gen AI. Transformative potential of Gen AI in Financial Services sector	Difference between Gen AI and other AI paradigms. Basic limitations of AI models in generating contextually relevant outputs. Fundamentals of Responsible AI			
Gen Al model selection: Expertly evaluating and selecting the most appropriate Gen Al model for each use case This involves analyzing published metrics, conducting user experiments, and considering available external models.	Importance of words and structures in influencing AI outputs through prompts. Understanding of context window limitations and strategies to work within them	Use cases of effective prompts Scenarios where prompt engineering significantly influences outputs	Theoretical frameworks of prompt engineering techniques. Concepts in prompt engineering, such as conditional prompts, context manipulation, and refining for specific outputs	Relationship between prompt design, model behaviour, and output diversity. Use of RAG and external tools (e.g., Langchain) to extend capabilities of generative artificial intelligence models, allowing interaction with external data sources	Nuances of prompt optimization and its role in generating tailored outputs. Use of prompt engineering tools and frameworks to streamline implementation of prompt engineering methods	Advanced prompt techniques (e.g., Chain-of-Thought, Tree of Thought prompting. Understanding and modification of model configurations to optimize output
Gen Al model evaluation: Assessing the quality, performance, and potential impact of chosen Gen Al models across various financial domains and applications is critical for ensuring successful deployment.	Process of generating content using AI models. Steps in handling and interacting with Gen AI tools	Principles behind Gen AI model operation and output generation. Significance of dataset quality and model training	Identification and use of specific metrics within general evaluation metrics most appropriate to the use case for model choice. Applications and domains where Gen AI models are used	Workflow of deploying and fine- tuning Al models. Concepts in Gen Al, including model architectures, training strategies, and optimization techniques	Complexities of fine-tuning and customizing AI models for specific tasks or outputs	Industry standards for model evaluation- Cross-domain evaluation practices
Gen Al application development and deployment: Designing and building applications around Gen Al models, integrating the language processing capabilities into specific use cases and domains, and troubleshooting Al tools.	Low-code, no-code application development. Limitations of model capabilities and performance	Developer tools and frameworks that accelerate development of Gen Al applications. Approaches to deploy models for inference using cloud platforms	Concepts behind context augmentation for prompts, such as Retrieval Augmented Generation (RAG). Concepts behind AI governance and how to test and evaluate applications for safety and alignment	Concepts behind context augmentation techniques, such as knowledge graphs. Safeguarding LLMs with Guardrails for content generation	Design of model pipeline. Concepts behind compute efficiency, such as quantization and similar efficiency techniques	Guardrail and moderation techniques, and the effectiveness of guardrail methods. Cutting- edge context augmentation techniques
Gen Al model development and fine-tuning: Leveraging in-dept learning expertise and statistical inference knowledge, tech practitioners are responsible for designing, implementing, training, and evaluating Gen Al models. This includes rigorous performance assessment and understanding their potential impact across various financial applications.	Basic deep learning theory and algorithms (e.g., GANs, VAEs, Transformers). Python libraries (e.g., TensorFlow, PyTorch, Keras). Data pre-processing, de-duplication, and cleaning techniques. Introduction to loss functions and evaluation metrics for generative tasks. Common dataset formats and evaluation methodologies for generative tasks	Probability theory and statistics (e.g., latent variables, probabilistic modeling). Embeddings and tokenization. Basic optimization techniques for training neural networks Introduction to finetuning techniques (e.g., supervised fine-tuning, parameter-efficient fine-tuning). Identifying and troubleshooting basic performance issues	Custom deep learning architectures tailored to specific tasks. Advanced embeddings and tokenization techniques. Intermediate optimization techniques for neural networks. Advanced loss functions and metrics for evaluating generative performance. Data handling for model fine-tuning	Innovative Gen AI architectures and algorithms. Advanced optimization techniques for model performance. Techniques for mitigating bias and ensuring fairness in generative outputs. Parallel cluster training and inference. Advanced generative concepts (e.g., transfer learning, distillation, explainability, self-supervised learning)	Advanced statistical inference techniques for generative tasks. Cutting-edge research in Gen Al architectures and techniques (e.g., conditional GANs, autoregressive models). Hardware acceleration techniques (e.g., GPUs, TPUs). Cloud computing platforms for training and scaling models. Specialized uses of Gen AI (e.g., protein generation, 3D model generation, world models)	Theoretical foundations of Gen AI. Frontiers of Gen AI research (e.g., generative modeling for scientific discovery). Multi-modal embeddings and models. Finetuning models to align with human preferences using reinforcement learning (e.g., RLHF, RLAIF). Mode interpretability and explainability methods for generative models

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Tech practitioner: Knowledge (2/2)*



Skill name and description

Proficiency level

Responsible AI and Gen AI practices:

Integrating and ensuring compliance of ethical principles in Al projects. Driving framework creation for responsible Al development



Ethical principles in AI Responsible Al principles and best practices for development and deployment. Ethical considerations and potential risks of Gen Al interaction. Importance of ethical considerations in AI development, such as bias, privacy, and transparency

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Implications of biased AI algorithms and potential societal impact. Importance of transparency and accountability in Al systems. Trustworthy and transparent communication of generative model capabilities and limitations. Ethical frameworks and guidelines for Gen Alpowered tools



Ethical frameworks and guidelines relevant to AI development. Historical context and evolution of Al ethics. Ethical challenges in Al governance, policy-making, and global implications



Advanced knowledge of ethical dimensions of AI through interdisciplinary perspectives. Techniques for evaluating the ethical implications of AI systems. Comprehensive understanding of ethical considerations in Al development

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00000 Incorporation of diverse ethical

perspectives and regulatory

understanding of global ethical

for developing comprehensive

considerations in Al. Techniques

requirements. In-depth

ethical guidelines

6 Ethical dimensions of AI through interdisciplinary perspectives. Ethical challenges in Al governance, policy-making, and global implications. Historical context and evolution of AI ethics.

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Gen AI models technical aspects of security and ethics:

Ensuring AI models and systems are secure and ethically sound. from development through deployment and operation.

Fundamental concepts of AI model security. Basics of system testing pre-deployment (e.g., beta testing, systems integration). Introduction to Al guardrails and their purpose. General trust and safety practices post go-live

In-depth understanding of Al security measures and system testing. Configuration and implementation of AI guardrails for content generation. Best practices for maintaining AI trust and safety

Advanced AI model security and testing methodologies. Strategic development and refinement of AI guardrails. Standard Operating Procedures (SOPs) in operational content moderation

Strategic development and refinement of Al guardrails. Advanced AI model security and testing methodologies. Standard Operating Procedures (SOPs) in operational content moderation

Best practices for maintaining Al trust and safety. In-depth understanding of AI security measures and system testing. Configuration and implementation of Al guardrails for content

Red teaming for discovering vulnerabilities in Gen Al models. Strategic development and refinement of AI guardrails. Advanced AI model security and testing methodologies

Ethical frameworks and guidelines

relevant to AI development

Prompt engineering:

Being adept at creating nuanced and strategic prompts that optimize AI model performance. This involves mastering various methodologies for crafting innovative and effective prompts to fully leverage the capabilities of Gen Al.

Theoretical frameworks of prompt engineering techniques. Importance of words and structures in influencing AI outputs through prompts. Use cases of effective prompts

Understanding of context window limitations and strategies to work within them. Relationship between prompt design, model behavior, and output diversity. Scenarios where prompt engineering significantly influences outputs

Concepts in prompt engineering, such as conditional prompts, context manipulation, and refining for specific outputs. Nuances of prompt optimization and its role in generating tailored outputs

Advanced prompt techniques (e.g., Chain-of-Thought, Tree of Thought prompting). Use of RAG and external tools (e.g., Langchain) to extend capabilities of generative artificial intelligence models, allowing interaction with external data sources

Use of prompt engineering tools and frameworks to streamline implementation of prompt engineering methods

Understanding and modification of model configurations to optimize output

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Tech practitioner: Abilities (1/2)*





Skill name and description	Proficiency level					
	1 •00000	2	3	4	5	6
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen AI models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen AI models.		Define the fundamental elements of a prompt. Define negative prompting. Describe the effect of inference parameters on model outputs	Compare prompt designs and corresponding AI outputs. Identify best practices for designing effective prompts. Describe fundamental prompt design techniques (e.g., and chain-ofthought prompting). Identify common prompt misuses and risks			
Application of Gen Al principles: Understanding and applying the concepts, frameworks, applications, and implications of Gen Al models.		Apply Gen AI concepts in practical scenarios, such as recognising when AI generated content is useful	Give prompts and observe the corresponding AI-generated outputs. Analyze the effectiveness of Gen AI outputs for specific tasks. Consider responsible AI aspects of application of Gen AI			
Gen Al model selection: Expertly evaluating and selecting the most appropriate Gen Al model for each use case This involves analyzing published metrics, conducting user experiments, and considering available external models.	Define prompt engineering and apply general best practices when interacting with Foundation Models	Identify the types of prompt engineering techniques (e.g., zero- shot and few-shot learning applied to foundation models). Apply prompt techniques as necessary for use cases	Identify which prompt-techniques are best-suited for specific foundation models Identify potential prompt misuses	Analyze potential bias in foundation model responses and design prompts that mitigate the bias. Apply prompt engineering strategies to refine model outputs and extend capabilities of models	Create prompts to elicit precise and diverse responses from AI models. Analyze the nuances of prompts and their influence on AI model behavior	Critically analyze the performance and limitations of prompt engineering techniques. Evaluate the effectiveness and adaptability of prompt engineering methods across diverse scenarios. Devise innovative prompt strategies that push the boundaries of Gen Al capabilities
Gen Al model evaluation: Assessing the quality, performance, and potential impact of chosen Gen Al models across various financial domains and applications is critical for ensuring successful deployment.	Apply Gen AI models with varied parameters for different outputs	Implement models to create content in specific domains or styles. Analyze diverse outputs and assess model performance under different settings	Analyze model-generated content for quality and coherence. Analyze the performance of different Gen Al models	Assess the impact of model variations on output quality. Implement models for specialized tasks or creative applications	Assess the effectiveness of models against diverse datasets and scenarios. Evaluate the reliability, adaptability, and scalability of advanced generative models for real-world applications	Solve critical performance issues. Lead interdisciplinary evaluation projects
Gen AI application development and deployment: Designing and building applications around Gen AI models, integrating the language processing capabilities into specific use cases and domains, and troubleshooting AI tools.	Develop applications that integrate Gen AI models via developer tools and cloud service offerings. Apply effective prompt engineering and model configuration to integrate foundational models to applications	Develop applications that integrate multiple Gen AI models. Deploy existing guardrails and moderation controls to control inputs and outputs to prevent undesirable model behaviors	Apply context augmentation using Retrieval Augmented Generation (using vector databases and retrieval algorithms). Develop applications that integrate multiple Gen Al models	Deploy Gen AI models for inference using serving infrastructure such as TGI/VLLM. Develop new guardrails and moderation controls to control inputs and outputs to prevent undesirable model behaviors	Architect and develop applications that integrate multiple Gen Al models, and use context augmentation techniques. Articulate trade-offs from using different context augmentation techniques	Integrate advanced technique. Solve critical development issues
Gen Al model development and fine-tuning: Leveraging in-dept learning expertise and statistical inference knowledge, tech practitioners are responsible for designing, implementing, training, and evaluating Gen Al models. This includes rigorous performance assessment and understanding their potential impact across various financial applications.	Implement Gen AI models using established architectures. Conduct basic evaluations to assess their effectiveness on simple tasks. Preprocess and prepare data for generative training. Train and evaluate generative models on benchmark datasets. Identify limitations and propose initial improvements to models	Develop Gen AI models by adapting existing architectures to specific use cases. Identify and troubleshoot basic performance issues. Apply effective prompt engineering and model configuration. Implement models based on specific requirements. Track model performance and adjust accordingly	Create custom deep learning architectures tailored to specific tasks and applications. Analyze model performance and implement debugging strategies to resolve complex issues. Fine-tune and adapt pre-trained models for optimal performance. Monitor and debug generative training processes for stability and convergence. Develop data pipelines (e.g., extract, transform, load) to create fine-tuning	Innovate novel Gen Al architectures and algorithms. Enhance model performance through advanced optimization techniques. Manage risks and ethical concerns effectively. Implement advanced fine-tuning techniques and continuous pretraining. Analyze generative models against state-of-the-art benchmarks	Drive optimization for higher-quality outputs. Develop innovative methodologies for solving tasks with generative models. Lead and manage Gen Al projects from conception to deployment. Optimize complex generative models for performance and efficiency. Conduct independent research and contribute to the advancement of Gen Al	Pioneer novel Gen Al model designs and algorithms. Lead research efforts to push the boundaries of the field. Set new standards for performance, safety, and ethical considerations in Gen Al. Lead collaborative research and development of generative models. Translate research advancements into practical applications

datasets

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Tech practitioner: Abilities (2/2)*



Skill name and description

Proficiency level

Responsible AI and Gen AI practices:

Integrating and ensuring compliance of ethical principles in Al projects. Driving framework creation for responsible Al development

Apply ethical principles in decision-making related to AI. Compare ethical issues in Al applications. Exercise professional skepticism to exercise sound judgment on Gen Al output. Compare AI systems for ethical compliance. Address potential ethical issues in Al projects

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Integrate comprehensive ethical considerations into Al development processes. Evaluate the implications of Al systems. Implement strategies to mitigate ethical risk. Apply ethical guidelines to Al development considering fairness, accountability, and transparency. Implement basic strategies to mitigate bias and ethical risks in Al systems

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Analyze the ethical implications of Al algorithms, assessing bias and fairness concerns. Design and implement custom ethical guidelines for Al projects. Develop strategies for integrating ethics into Al development Monitor and evaluate AI systems for ethical compliance. Analyze AI systems for fairness, transparency, and accountability

Design and enforce robust ethical frameworks for AI use across various projects. Critically assess existing guidelines and recommend improvements. Evaluate model biases, limitations, and ethical implications. Analyze the impact of AI on different societal groups and cultures. Design frameworks for ethical decision-making in AI design and deployment

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Develop advanced frameworks for responsible AI usage. Lead efforts to refine ethical standards and practices in Al development Evaluate and critique AI policies, regulations, and ethical guidelines. Assess the interplay of AI ethics

with legal, cultural, and sociopolitical aspects. Devise interdisciplinary approaches to address ethical challenges in Al

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000000 Create innovative ethical

frameworks and guidelines for emerging AI domains. Critically evaluate the ethical implications and societal impact of emerging Al technologies and Al-generated content. Evaluate and critique Al policies, regulations, and ethical guidelines. Advocate for responsible and ethical development and use of GenAl technologies

Gen AI models technical aspects of security and ethics:

Ensuring AI models and systems are secure and ethically sound, from development through deployment and operation.

Identify basic security vulnerabilities in AI models. Assist in pre-deployment system testing. Support configuration of AL guardrails. Understand operational content monitoring basics

Implement security measures to protect AI models. Conduct comprehensive pre-deployment system testing. Configure and adjust Al guardrails effectively. Monitor AI systems for trust and safety

Oversee and refine comprehensive system testing procedures. Strategically refine and enhance AI guardrails. Conduct regular audits and compliance checks to maintain ethical standards

Develop sophisticated security

protocols tailored to organizational needs. Refine and enhance AI guardrails to address emerging threats and ethical considerations

moderation and trust and safety initiatives. Utilize red teaming to identify and mitigate security risks in AI systems. Implement strategies for designing and governing ethical AI systems

Lead operational content

Direct organizational efforts in establishing and maintaining high standards for AI security and ethics. Lead red teaming exercises to identify vulnerabilities and enhance trust and safety protocols

Prompt engineering:

Being adept at creating nuanced and strategic prompts that optimize AI model performance. This involves mastering various methodologies for crafting innovative and effective prompts to fully leverage the capabilities of Gen Al.

Define prompt engineering and apply general best practices when interacting with Foundation Models. Identify the types of prompt engineering techniques (e.g., zero-shot and few-shot learning applied to foundation models)

Apply prompt techniques as necessary for use cases. Identify which prompt techniques are bestsuited for specific foundation models. Identify potential prompt misuses

Analyze potential bias in foundation model responses and design prompts that mitigate the bias. Apply prompt engineering strategies to refine model outputs and extend capabilities of models. Create prompts to elicit precise and diverse responses from Al models

Analyze the nuances of prompts and their influence on Al model behavior. Critically analyze the performance and limitations of prompt engineering techniques

Evaluate the effectiveness and adaptability of prompt engineering methods across diverse scenarios. Devise innovative prompt strategies that push the boundaries of GenAl capabilities

Oversee the development and implementation of advanced prompt engineering techniques within the organization. Mentor team members on best practices and ensure the alignment of prompt strategies with organizational goals

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Risk and compliance practitioner: Skills and proficiencies*





Skill name and description	Proficiency level					
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen AI models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen AI models.	1 •00000	Understands basic prompt design concepts and techniques, and can explain the importance of prompt design in Gen Al	Craft prompts using best practices, such as understanding when to use zero shot, one shot, or domain-based prompting techniques, to generate specific outputs. Design of prompts should also incorporate basic anonymization techniques, such as data masking	4	5	6
Gen Al principles and applications: This skill speaks to the practical understanding and utilization of Gen Al tools. It goes beyond using the tools, requiring knowledge of the underlying principles and best practices for optimal application.		Understands the underlying concepts and theoretical frameworks of Gen Al	Implements basic Gen AI to support everyday tasks (e.g., administrative and research), and optimizes prompts to increase the quality of outputs			
Regulatory, legal, and risk management compliance in Al and Gen Al: This skill emphasizes the importance of understanding the legal and regulatory landscape surrounding Gen Al. Finance professionals need to be capable of developing and implementing strategies that ensure Gen Al projects adhere to all relevant guidelines and manage potential risks.	Understands basic regulatory and legal requirements for Gen AI, including basic risk management principles	Ensures basic compliance with regulatory standards in Gen Al projects and assists in identifying and mitigating simple risks	Leads compliance efforts for Gen Al projects, ensuring adherence to complex regulatory requirements	Develops comprehensive strategies for regulatory compliance, managing risk assessment and mitigation plans	Leads organization-wide compliance and risk management initiatives, ensuring all Gen Al projects adhere to regulatory and legal standards	Provides strategic oversight of regulatory and legal compliance, establishing and enforcing comprehensive risk management policies
Ethical frameworks for Gen AI: As Gen AI becomes more powerful, ethical considerations are paramount. This skill focuses on establishing ethical guidelines and governance frameworks for Gen AI projects, ensuring responsible AI development and deployment.	Aware of basic ethical and governance knowledge for Gen Al initiatives	Understands fundamental ethical issues and considerations in Gen AI and can explain basic ethical guidelines related to Gen AI use	Assesses ethical implications of specific Gen Al use-cases and provides input on mitigating potential ethical risks	Creates comprehensive ethical guidelines and governance frameworks for Gen AI, monitoring compliance and proactively addressing ethical concerns	Ensures all Gen AI projects comply with relevant ethical standards and regulations, providing oversight and guidance on ethical issues	Establishes an organization-wide culture of ethical Gen Al use and leads the development of comprehensive governance policies and practices
Gen Al data governance: This skill highlights the importance of data in Gen Al applications. Professionals need to design and implement robust data strategies, governance frameworks, and architectures to ensure data integrity, security, and usability within Gen Al projects.	Understands the basics of data management, governance, and architecture, and can explain key concepts of data governance	Supports the development of data governance policies and procedures, ensuring data quality and integrity	Implements data governance for small projects, ensuring data governance policies are followed	Manages data governance frameworks for large-scale projects, ensuring robust data security and compliance measures	Develops and leads data strategy initiatives, ensuring alignment with business objectives and regulatory requirements	Establishes and oversees comprehensive data strategy and governance across the organization

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Risk and compliance practitioner: **Knowledge***



stewardship in Gen Al



Skill name and description	Proficiency level					
	1 •00000	2 ••0000	3 ••••000	4	5	6 •••••
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen Al models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen Al models.		Concept of prompt design	Techniques in prompt construction. Impact of prompts on AI outputs, recognizing areas for improvements. Principles of how prompts shape AI-generated content			
Gen Al principles and applications: This skill speaks to the practical understanding and utilization of Gen Al tools. It goes beyond using the tools, requiring knowledge of the underlying principles and best practices for optimal application.		Gen AI as a subset of AI focusing on content creation. Fundamental purpose of Gen AI. Transformative potential of Gen AI in Financial Services sector	Difference between Gen AI and other AI paradigms. Basic limitations of AI models in generating contextually relevant outputs. Fundamentals of Responsible AI			
Regulatory, legal, and risk management compliance in AI and Gen AI: This skill emphasizes the importance of understanding the legal and regulatory landscape surrounding Gen AI. Finance professionals need to be capable of developing and implementing strategies that ensure Gen AI projects adhere to all relevant guidelines and manage potential risks.	Basic legal and regulatory guidelines related to Gen AI. General awareness of Gen AI ethics and biases. Fundamental compliance requirements for Gen AI	Specific regulations and legal requirements for Gen Al. Key principles of data protection. Awareness of Gen Al governance frameworks	Gen AI model validation and verification processes. Risk management frameworks specific to Gen AI. Legal implications of Gen AI deployment in financial services	Advanced data protection strategies for Gen Al. Comprehensive Al risk mitigation techniques. Ethical Al decision-making frameworks. Impact of regulatory changes on Gen Al projects	Evaluation of emerging Gen Al regulations. Advanced Gen Al governance and oversight mechanisms. Cross-jurisdictional legal considerations for Gen Al. Ethical Al leadership principles	Integration of Gen AI regulatory, legal, and risk management knowledge. Advanced ethical Gen AI development strategies. Global Gen AI regulatory landscape and future trends
Ethical frameworks for Gen AI: As Gen AI becomes more powerful, ethical considerations are paramount. This skill focuses on establishing ethical guidelines and governance frameworks for Gen AI projects, ensuring responsible AI development and deployment.	Basic ethical principles in Gen Al. Understanding of basic ethical guidelines for Gen Al use. Knowledge of common biases in Gen Al systems	Key ethical considerations for data handling in Gen AI. Basic methods for identifying ethical issues in Gen AI. Awareness of potential ethical risks in Gen AI	Elements of governance frameworks for Gen AI. Ethical standards and guidelines for Gen AI. Basic Gen AI ethics review processes. Impact of ethical guidelines on Gen AI development	Strategies for monitoring ethical compliance. Governance structures for Gen AI ethics. Methods for proactive ethical risk management. Ethical decisionmaking frameworks for Gen AI	Regulatory standards related to Gen AI ethics. Advanced ethical principles for Gen AI development. Impact of ethical guidelines on organization-wide Gen AI initiatives	Best practices for ethical Gen Al leadership. Organizational culture of ethical Gen Al use
Gen Al data governance: This skill highlights the importance of data in Gen Al applications. Professionals need to design and implement robust data strategies, governance frameworks, and architectures to ensure data integrity, security, and usability within Gen Al projects.	Basic concepts of data strategy in Gen AI. Fundamental principles of data governance for Gen AI. Understanding of data quality and integrity in AI. Basic awareness of Gen AI data management practices	Key components of data governance frameworks for Gen AI. Principles of Gen AI data lifecycle management. Awareness of Gen AI-specific data privacy and security watch-outs. Understanding of data	Comprehensive knowledge of Gen AI data governance standards. Methods for ensuring data compliance in Gen AI Best practices in Gen AI data governance implementation. Key data security principles for	Techniques for ensuring robust data security in Gen AI. Compliance measures for Gen AI data governance. Strategies for maintaining data integrity and usability in Gen AI	Strategic planning for Gen AI data governance. Alignment of Gen AI data strategy with business goals. Techniques for scalable Gen AI data governance	Organization-wide Gen AI data strategy development. Enterprise- level Gen AI data governance frameworks

Gen Al projects

The Skills Framework (SFw) that SkillsFuture Singapore uses is moving towards categorizing skills' proficiency levels as "Basic", "Intermediate" and "Advanced," and new Gen AI skills will be categorized in the same way. The proficiency level scores assigned to the new Gen AI skills here can be broadly mapped as Basic (levels 1-2), Intermediate (levels 3-4), and Advanced (levels 5-6).

Risk and compliance practitioner: **Abilities***





Skill name and description	Proficiency level					
Prompt design: This skill highlights the importance of crafting effective prompts to guide Gen AI models toward desired outputs. It involves understanding how to refine prompts to elicit contextually appropriate and valuable results from Gen AI models.	1	Define the fundamental elements of a prompt. Define negative prompting	Compare prompt designs and corresponding Al outputs. Identify best practices for designing effective prompts. Describe fundamental prompt design techniques (e.g., and chain-ofthought prompting). Identify common prompt misuses and risks	4	5	6
Gen Al principles and applications: This skill speaks to the practical understanding and utilization of Gen Al tools. It goes beyond using the tools, requiring knowledge of the underlying principles and best practices for optimal application.		Apply Gen AI concepts in practical scenarios, such as recognising when AI generated content is useful	Give prompts and observe the corresponding Al-generated outputs. Analyse the effectiveness of Gen Al outputs for specific tasks. Consider responsible Al aspects of application of Gen Al			
Regulatory, legal, and risk management compliance in Al and Gen Al: This skill emphasizes the importance of understanding the legal and regulatory landscape surrounding Gen Al. Finance professionals need to be capable of developing and implementing strategies that ensure Gen Al projects adhere to all relevant guidelines and manage potential risks.	Search for relevant Gen Al legal and regulatory information. Follow simple Gen Al risk mitigation techniques. Conduct basic Gen Al compliance audits	Assist in Gen AI compliance monitoring. Identify and mitigate simple Gen AI risks. Support documentation of compliance efforts. Assist in updating compliance procedures	Ensure adherence to complex regulatory requirements. Develop compliance documentation. Train team members on compliance standards	Develop regulatory compliance strategies. Manage Gen AI risk assessment plans. Oversee AI compliance audits. Adapt strategies to evolving regulations	Drive strategic Gen Al-related risk management efforts. Ensure all Gen Al projects adhere to regulatory standards	Develop organization-level Gen Al compliance policies. Enforce regulatory standards across all Gen Al use cases and implementation
Ethical frameworks for Gen AI: As Gen AI becomes more powerful, ethical considerations are paramount. This skill focuses on establishing ethical guidelines and governance frameworks for Gen AI projects, ensuring responsible AI development and deployment.	Explain basic ethical guidelines for Gen AI. Recognize the importance of ethical Gen AI practices. Follow ethical guidelines in Gen AI use	Document ethical considerations in Gen AI projects. Identify potential biases and ethical issues. Assess ethical implications in Gen AI use-cases	Implement ethical standards and guidelines. Ensure adherence to ethical frameworks. Conduct Gen AI ethics reviews	Develop comprehensive ethical guidelines for development and use of Gen Al. Address ethical concerns proactively. Adapt governance structures to evolving ethical standards	Provide oversight on ethical issues surrounding the use of Gen Al. Lead ethical reviews for Gen Al projects. Guide teams in implementing and ensuring compliance to ethical standards	Oversee ethical Gen AI leadership initiatives. Foster ethical AI culture across the organization. Lead the development of ethical policies around the development and use of Gen AI
Gen Al data governance: This skill highlights the importance of data in Gen Al applications. Professionals need to design and implement robust data strategies, governance frameworks, and architectures to ensure data integrity, security, and usability within Gen Al projects.	Explain basic Gen Al data governance concepts. Follow simple Al data management practices. Ensure basic data quality and integrity in Gen Al. Assist in documenting Gen Al data governance procedures	Ensure data quality and integrity in Gen Al projects. Assist in implementing Gen Al data governance frameworks. Identify areas for Gen Al data quality improvement. Support development of Gen Al data governance policies	Lead Gen AI data governance implementation for small projects. Ensure adherence to Gen AI data governance policies. Conduct data compliance checks for Gen AI	Oversee architecture design and implementation for Gen Al. Ensure robust data security measures in Gen Al. Monitor compliance with Gen Al data governance standards. Address data integrity issues proactively	Manage Gen Al data governance for large-scale projects. Lead Gen Al data strategy and governance initiatives. Align Gen Al data strategy with regulatory requirements. Drive data quality and security measures in Al projects	Establish enterprise-wide Gen Al data strategy. Lead organizational Gen Al data strategy and governance efforts. Ensure organization-wide data compliance for Gen Al

Generative AI Jobs Transformation Map – A guide for the financial sector in Singapore

The Skills Framework (SFw) that SkillsFuture Singapore uses is moving towards categorizing skills' proficiency levels as "Basic", "Intermediate" and "Advanced," and new Gen AI skills will be categorized in the same way. The proficiency level scores assigned to the new Gen AI skills here can be broadly mapped as Basic (levels 1-2), Intermediate (levels 3-4), and Advanced (levels 5-6).

Business leaders: Skills and proficiencies*





Skill name and description	Proficiency level					
Prompt design: The ability to craft and refine prompts— the instructions given to Gen Al models—becomes an essential skill. Effective prompt design is crucial for guiding Gen Al models to produce accurate, contextually appropriate, and desired outputs. Gen Al principles and applications: This foundational skill involves understanding the core principles of how	1	Understands basic prompt design concepts and techniques, and can explain the importance of prompt design in Gen Al Understands the underlying concepts and theoretical	Craft prompts using best practices, such as understanding when to use zero shot, one shot, or domain-based prompting techniques, to generate specific outputs. Design of prompts should also incorporate basic anonymization techniques, such as data masking Implements basic Gen AI to support everyday tasks (e.g.,	4	5	6
Gen Al tools work and their potential use cases across domains. Gen Al strategy: This foundational skill involves analyzing business objectives and identifying opportunities to seamlessly integrate Gen Al technologies. It requires a deep understanding of how Gen Al can be leveraged to achieve desired outcomes and goals.	Understands what Gen AI is, its basic applications, and Gen AI can be applied to improve business processes	Understands basic Gen Al use relevant to the business and supports initial exploration of Gen Al projects within the organization	administrative and research), and optimizes prompts to increase the quality of outputs Monitors and evaluates Gen AI market trends and emerging usecases, providing detailed analysis on potential applications of Gen AI within the organization	Leads the development and execution of Gen AI projects in targeted business areas, ensuring the successful implementation and integration of Gen AI solutions	Evaluates the overall impact of Gen AI on business productivity and innovation and identifies strategic opportunities for leveraging Gen AI to drive competitive advantage	Develops a comprehensive Gen A strategy that aligns with business goals
Leading Gen AI-enabled transformations: This goes beyond implementing Gen AI tools. It emphasizes the leadership needed to guide organizations through the cultural shifts and process changes inherent in adopting AI at scale.	Participates in Gen AI project planning and provides support during implementation, communicating the benefits and objectives to team members	Coordinates small Gen AI projects, tracks their progress, and engages with stakeholders to ensure alignment and support	Leads the implementation of project plans for Gen AI initiatives, managing resources and timelines to ensure project success	Oversees medium-scale Gen Al projects, ensuring they are delivered on time and within budget, and applies change management principles to facilitate smooth transitions	Manages large-scale, complex Gen Al transformation projects from inception to completion, addressing cultural and organizational challenges related to Gen Al adoption	Directs management and authorizes ownership of large- scale Gen AI transformations
Gen Al innovation, research and development, and innovation management: This area emphasizes staying ahead of the curve. Finance professionals need to lead research and development initiatives that push the boundaries of Gen Al, ensuring alignment with business goals and fostering a culture of continuous improvement.	Demonstrates familiarity with basic research concepts and methodologies in Gen AI and can explain the importance of R&D in Gen AI	Assists in conducting Gen Al research projects, supporting data collection and analysis for R&D activities	Leads small-scale projects focused on Gen AI innovation, implementing innovative solutions and measuring their impact	Develops and oversees Gen AI research and development initiatives, ensuring alignment with organizational goals and strategies	Leads strategic innovation efforts in Gen AI, fostering a culture of innovation within the organization	Defines and leads the organization's overall Gen AI R&E strategy
Gen Al data governance: This skill set focuses on the backbone of successful Gen Al implementations. It involves designing robust data strategies, implementing sound governance frameworks, and building scalable architectures that can support Gen Al applications.	Understands the basics of data management, governance, and architecture, and can explain key concepts of data governance	Supports the development of data governance policies and procedures, ensuring data quality and integrity	Implements data governance for small projects, ensuring data governance policies are followed	Manages data governance frameworks for large-scale projects, ensuring robust data security and compliance measures	Develops and leads data strategy initiatives, ensuring alignment with business objectives and regulatory requirements	Establishes and oversees comprehensive data strategy and governance across the organization
Ethical frameworks for Gen AI: This critical area emphasizes the responsible development and deployment of Gen AI. It involves establishing and enforcing ethical guidelines and governance structures. This includes ensuring Gen AI projects are in line with regulatory standards, organizational values, and ethical considerations.	Aware of basic ethical and governance knowledge for Gen Al initiatives	Assesses ethical implications in specific Gen AI use-cases and provides input on mitigating potential ethical risks	Assesses ethical implications in specific Gen AI use-cases and provides input on mitigating potential ethical risks	Creates comprehensive ethical guidelines and governance frameworks for Gen Al, monitoring compliance and proactively addressing ethical concerns	Ensures all Gen Al projects comply with relevant ethical standards and regulations, providing oversight and guidance on ethical issues	Establishes an organization-wide culture of ethical Gen AI use and leads the development of comprehensive governance policies and practices
Regulatory, legal, and risk management compliance: With Gen Al's growing influence, understanding the legal and regulatory landscape is crucial. This skill involves developing and implementing strategies to ensure Gen Al projects comply with all relevant laws, regulations, and risk management requirements.	Understands basic regulatory requirements for Gen Al and is aware of fundamental regulatory and legal requirements for Gen Al, including basic risk management principles	Ensures basic compliance with regulatory standards in Gen Al projects and assists in identifying and mitigating simple risks	Leads compliance efforts for Gen Al projects, ensuring adherence to complex regulatory requirements	Develops comprehensive strategies for regulatory compliance, managing risk assessment and mitigation plans	Leads organization-wide compliance and risk management initiatives, ensuring all Gen Al projects adhere to regulatory and legal standards	Provides strategic oversight of regulatory and legal compliance, establishing and enforcing comprehensive risk management policies

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Business leaders: Knowledge*





Skill name and description	Proficiency level					
	1 •00000	2	3	4	5	6
Prompt design: The ability to craft and refine prompts— the instructions given to Gen Al models—becomes an essential skill. Effective prompt design is crucial for guiding Gen Al models to produce accurate, contextually appropriate, and desired outputs.		Concept of prompt design	Techniques in prompt construction. Impact of prompts on AI outputs, recognizing areas for improve- ments. Principles of how prompts shape AI-generated content			
Gen Al principles and applications: This foundational skill involves understanding the core principles of how Gen Al tools work and their potential use cases across domains.		Gen AI as a subset of AI focusing on content creation. Fundamental purpose of Gen AI. Transformative potential of Gen AI in Financial Services sector	Difference between Gen Al and other Al paradigms. Basic limitations of Al models in generating contextually relevant outputs. Fundamentals of Responsible Al			
Gen Al strategy: This foundational skill involves analyzing business objectives and identifying opportunities to seamlessly integrate Gen Al technologies. It requires a deep understanding of how Gen Al can be leveraged to achieve desired outcomes and goals.	Potential applications of Gen Al tools. Understanding of basic Gen Al technologies. Familiarity with Gen Al terminologies	Understanding of business needs and how Gen AI can address them. Awareness of initial steps for Gen AI project exploration. Knowledge of simple use-cases for Gen AI	Understanding of market trends and applications of Gen AI tools in Financial Services sector. Knowledge of emerging Gen AI use-cases. Gen AI technologies. Familiarity with Gen AI success case studies and use-cases	Understanding of implementation challenges in Gen Al. Knowledge of integration techniques for Gen Al. Familiarity with project management wit Gen Al implementation. Awareness of best practices for Gen Al deployment	Understanding of Gen Al's role in business innovation. Knowledge of strategic opportunities in Gen Al. Awareness of methods for measuring Gen Al effectiveness. Familiarity with case studies of Gen Al-driven competitive advantage	Comprehensive understanding of aligning Gen AI with business goals. Knowledge of cross- functional Gen AI integration. Awareness of future trends in Gen AI
Leading Gen Al-enabled transformations: This goes beyond implementing Gen Al tools. It emphasizes the leadership needed to guide organizations through the cultural shifts and process changes inherent in adopting Al at scale.	Basic concepts of Gen AI initiatives. Understanding project planning basics. Awareness of Gen AI benefits and objectives	Knowledge of small-scale Gen Al project coordination. Understanding stakeholder engagement. Awareness of tracking and monitoring techniques. Familiarity with project progress reporting. Basic understanding of alignment strategies	Principles of resource and timeline management. Understanding of Gen Al project success factors. Awareness of common challenges in Al project execution. Familiarity with implementation best practices	Understanding of budget and time management. Principles of effective strategy implementation. Awareness of change management techniques. Familiarity with risk management in Gen AI projects	Knowledge of cultural and organizational change. Principles of large-scale project execution. Awareness of Gen Al adoption challenges. Familiarity with endto-end project management practices	Awareness of global best practices for Gen AI transformations. Familiarity with long-term impact assessment of AI projects. Expertise in large-scale transformation strategies
Gen Al innovation, research and development, and innovation management: This area emphasizes staying ahead of the curve. Finance professionals need to lead research and development initiatives that push the boundaries of Gen Al, ensuring alignment with business goals and fostering a culture of continuous improvement.	Familiarity with Gen AI concepts. Understanding the role of innovation with Gen AI. Awareness of fundamental Gen AI tools Importance of R&D in Gen AI	Knowledge of data collection techniques. Familiarity with simple Gen AI research projects. Awareness of R&D processes and procedures	Knowledge of small-scale Gen Al innovation projects. Understanding of metrics for measuring innovation impact. Familiarity with innovative solutions leveraging Gen Al. Knowledge of Gen Al innovation lifecycle	Knowledge of aligning R&D with business goals. Familiarity with managing research teams. Understanding of strategic planning for Gen AI initiatives	Understanding of fostering a culture of innovation. Awareness of cutting-edge Gen Al technologies. Knowledge of integrating innovation into business processes. Familiarity with long-term innovation planning	Expertise in R&D strategy and vision. Understanding of aligning R&D with organizational vision. Familiarity with global trends in Gen AI research and innovation. Awareness of leading AI research institutions. Knowledge of driving organizational change through R&D
Gen Al data governance: This skill set focuses on the backbone of successful Gen Al implementations. It involves designing robust data strategies, implementing sound governance frameworks, and building scalable architectures that can support Gen Al applications.	Basic concepts of data strategy in Gen AI. Fundamental principles of data governance for Gen AI. Understanding of data quality and integrity in AI. Basic awareness of Gen AI data management practices	Key components of data governance frameworks for Gen Al. Principles of Gen Al data lifecycle management. Awareness of Gen Al-specific data privacy and security watch-outs. Understand- ing of data stewardship in Gen Al	Comprehensive knowledge of Gen Al data governance standards. Methods for ensuring data compliance in Gen Al. Best practices in Gen Al data governance implementation. Key data security principles for Gen Al projects	Techniques for ensuring robust data security in Gen AI. Compliance measures for Gen AI data governance. Strategies for maintaining data integrity and usability in Gen AI	Strategic planning for Gen Al data governance. Alignment of Gen Al data strategy with business goals. Techniques for scalable Gen Al data governance	Organization-wide Gen AI data strategy development. Enterprise- level Gen AI data governance frameworks
Ethical frameworks for Gen Al: This critical area emphasizes the responsible development and deployment of Gen Al. It involves establishing and enforcing ethical guidelines and governance structures. This includes ensuring Gen Al projects are in line with regulatory standards, organizational values, and ethical considerations.	Basic ethical principles in Gen AI. Understanding of basic ethical guidelines for Gen AI use. Knowledge of common biases in Gen AI systems.	Key ethical considerations for data handling in Gen Al. Basic methods for identifying ethical issues in Gen Al. Awareness of potential ethical risks in Gen Al	Elements of governance frameworks for Gen Al. Ethical standards and guidelines for Gen Al. Basic Gen Al ethics review processes. Impact of ethical guidelines on Gen Al development	Strategies for monitoring ethical compliance. Governance structures for Gen AI ethics. Methods for proactive ethical risk management. Ethical decisionmaking frameworks for Gen AI	Regulatory standards related to Gen AI ethics. Advanced ethical principles for Gen AI development. Impact of ethical guidelines on organization-wide Gen AI initiatives	Best practices for ethical Gen Al leadership. Organizational culture of ethical Gen Al use
Regulatory, legal, and risk management compliance: With Gen Al's growing influence, understanding the legal and regulatory landscape is crucial. This skill involves developing and implementing strategies to ensure Gen Al projects comply with all relevant laws, regulations, and risk management requirements.	Basic legal and regulatory guidelines related to Gen AI. General awareness of Gen AI ethics and biases. Fundamental compliance requirements for Gen AI	Specific regulations and legal requirements for Gen Al. Key principles of data protection Awareness of Gen Al governance frameworks	Gen AI model validation and verification processes. Risk management frameworks specific to Gen AI. Legal implications of Gen AI deployment in financial services	Advanced data protection strategies for Gen Al. Comprehen- sive Al risk mitigation techniques. Ethical Al decision-making frameworks. Impact of regulatory changes on Gen Al projects	Evaluation of emerging Gen Al regulations. Advanced Gen Al governance and oversight mechanisms. Cross-jurisdictional legal considerations for Gen Al. Ethical Al leadership principles	Integration of Gen AI regulatory, legal, and risk management knowledge. Advanced ethical Gen AI development strategies. Global Gen AI regulatory landscape and future trends

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Business leaders: Abilities*





Skill name and description	Proficiency level					
Prompt design: The ability to craft and refine prompts—the instructions given to Gen AI models—becomes an essential skill. Effective prompt design is crucial for guiding Gen AI models to produce accurate, contextually appropriate, and desired outputs.	1	Define the fundamental elements of a prompt. Define negative prompting	Compare prompt designs and corresponding AI outputs. Identify best practices for designing effective prompts. Describe fundamental prompt design techniques (e.g., and chain-ofthought prompting). Identify common prompt misuses and risks	4	5	6
Gen Al principles and applications: This foundational skill involves understanding the core principles of how Gen Al tools work and their potential use cases across domains.		Apply Gen AI concepts in practical scenarios, such as recognizing when AI generated content is useful	Give prompts and observe the corresponding Al-generated outputs. Analyze the effectiveness of Gen Al outputs for specific tasks. Consider responsible Al aspects of application of Gen Al			
Gen Al strategy: This foundational skill involves analyzing business objectives and identifying opportunities to seamlessly integrate Gen Al technologies. It requires a deep understanding of how Gen Al can be leveraged to achieve desired outcomes and goals.	Describe potential applications of Gen AI. Identify Gen AI opportunities in simple business processes. Communicate the benefits and potential watch-outs of Gen AI to colleagues. Assist in basic Gen AI research	Identify simple Gen AI use-cases. Articulate how Gen AI can address specific business needs. Support initial exploration of Gen AI projects. Describe basic Gen AI project goals. Assist in gathering requirements for Gen AI projects	Analyze Gen Al market developments. Evaluate emerging Gen Al use-cases. Monitor competitive Gen Al trends. Recommend Gen Al opportunities based on market analysis	Implement Gen AI projects in targeted areas. Ensure successful integration of Gen AI tools and solutions. Manage project teams for Gen AI initiatives. Oversee the execution of Gen AI strategies	Evaluate Gen AI's impact on productivity. Assess Gen AI's role in driving innovation within Business Units. Recommend Gen AI strategies for competitive advantage	Define overarching organization - wide Gen AI strategies. Align Gen AI initiatives with business objectives. Drive organizational innovation through Gen AI stewardship and leadership
Leading Gen Al-enabled transformations: This goes beyond implementing Gen Al tools. It emphasizes the leadership needed to guide organizations through the cultural shifts and process changes inherent in adopting Al at scale.	Assist in planning Gen Al initiatives. Participate in project implementation activities. Support project documentation efforts. Assist in scheduling and coordination tasks	Coordinate small-scale Gen Al projects. Track and monitor project progress. Provide progress updates and reports. Engage with stakeholders to ensure alignment during implementation and rollout of Gen Al projects	Lead implementation of small- scale Gen AI project plans. Manage resources and timelines effectively. Ensure project deliverables are met. Address project issues and challenges	Ensure projects are on time and within budget. Apply change management principles. Facilitate smooth transitions during project phases	Manage large-scale Gen Al transformation projects. Address cultural and organizational challenges. Lead cross-functional project teams. Ensure successful end-to-end project execution	Provide strategic leadership for Gen Al transformations. Authorize & oversee large-scale Al projects. Ensure alignment of Gen Al business case with business goals. Drive organizational change and cultural integration. Lead longterm strategic planning and impact assessment
Gen Al innovation, research and development, and innovation management: This area emphasizes staying ahead of the curve. Finance professionals need to lead research and development initiatives that push the boundaries of Gen Al, ensuring alignment with business goals and fostering a culture of continuous improvement.	Assist in basic research activities. Describe the importance of Gen Al R&D. Support initial research documentation	Assist in data collection for Gen Al research. Supports in conducting simple research projects. Track progress of R&D activities	Lead small-scale Gen AI innovation projects. Measure the impact of Gen AI innovations. Manage project timelines and resources. Report on project outcomes and learnings	Develop Gen AI research initiatives. Oversee R&D project execution. Align R&D activities with business strategies. Ensure quality and relevance of research outputs	Lead strategic Gen Al innovation efforts. Foster a culture of Gen Alled innovation. Drive continuous improvement in Gen Al projects. Identify and integrate cutting-edge Gen Al tools & technologies into R&D projects. Promote collaboration across teams for innovation	Define the overall Gen AI R&D strategy. Align R&D with long-term business goals. Drive organizational change through strategic Gen AI-led R&D efforts
Gen Al data governance: This skill set focuses on the backbone of successful Gen Al implementations. It involves designing robust data strategies, implementing sound governance frameworks, and building scalable architectures that can support Gen Al applications.	Explain basic Gen AI data governance concepts. Follow simple AI data management practices. Ensure basic data quality and integrity in Gen AI. Assist in documenting Gen AI data governance procedures	Ensure data quality and integrity in Gen Al projects. Assist in imple- menting Gen Al data governance frameworks. Identify areas for Gen Al data quality improvement. Support development of Gen Al data governance policies	Lead Gen AI data governance implementation for small projects. Ensure adherence to Gen AI data governance policies. Conduct data compliance checks for Gen AI	Oversee architecture design and implementation for Gen Al. Ensure robust data security measures in Gen Al. Monitor compliance with Gen Al data governance standards. Address data integrity issues proactively	Manage Gen Al data governance for large-scale projects. Lead Gen Al data strategy and governance initiatives. Align Gen Al data strategy with regulatory require- ments. Drive data quality and security measures in Al projects	Establish enterprise-wide Gen Al data strategy. Lead organizational Gen Al data strategy and governance efforts. Ensure organization-wide data compliance for Gen Al
Ethical frameworks for Gen Al: This critical area emphasizes the responsible development and deployment of Gen Al. It involves establishing and enforcing ethical guidelines and governance structures. This includes ensuring Gen Al projects are in line with regulatory standards, organizational values, and ethical considerations.	Explain basic ethical guidelines for Gen Al. Recognize the importance of ethical Gen Al practices. Follow ethical guidelines in Gen Al use	Document ethical considerations in Gen AI projects. Identify potential biases and ethical issues. Assess ethical implications in Gen AI use-cases	Implement ethical standards and guidelines. Ensure adherence to ethical frameworks. Conduct Gen AI ethics reviews	Develop comprehensive ethical guidelines for development and use of Gen Al. Address ethical concerns proactively. Adapt governance structures to evolving ethical standards	Provide oversight on ethical issues surrounding the use of Gen Al. Lead ethical reviews for Gen Al projects. Guide teams in implementing and ensuring compliance to ethical standards	Oversee ethical Gen Al leadership initiatives. Foster ethical Al culture across the organization. Lead the development of ethical policies around the development and use of Gen Al
Regulatory, legal, and risk management compliance: With Gen Al's growing influence, understanding the legal and regulatory landscape is crucial. This skill involves developing and implementing strategies to ensure Gen Al projects comply with all relevant laws, regulations, and risk management requirements.	Search for relevant Gen AI legal and regulatory information. Follow simple Gen AI risk mitigation techniques. Conduct basic Gen AI compliance audits	Assist in Gen AI compliance monitoring. Identify and mitigate simple Gen AI risks. Support documentation of compliance efforts. Assist in updating compliance procedures	Ensure adherence to complex regulatory requirements. Develop compliance documentation. Train team members on compliance standards	Develop regulatory compliance strategies. Manage Gen Al risk assessment plans. Oversee Al compliance audits. Adapt strategies to evolving regulations	Drive strategic Gen AI -related risk management efforts. Ensure all Gen AI projects adhere to regulatory standards	Develop organization-level Gen Al compliance policies. Enforce regulatory standards across all Gen Al use cases and implementation

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Business user: Skills and proficiencies*





killı	name and	description

Proficiency level























Prompt design:

Crafting effective prompts is an art and a science. It's the key to unlocking the potential of Gen Al models by providing clear instructions and context. This involves formulating specific, well-defined prompts that guide the Gen Al model toward generating the desired outputs, as well as iteratively adjusting and improving prompts based on the Al's responses, ensuring clarity and precision in the communication loop.

This skill emphasizes the need to understand the underlying

mechanisms and potential applications of Gen Al. It involves

understanding the basics—grasping how Gen AI models work, their

strengths, limitations, and potential biases. Identifying use cases is also

a part of this skill. This includes recognizing opportunities where Gen Al tools can be effectively implemented to optimize workflows, automate

Understands basic prompt design concepts and techniques, and can explain the importance of prompt design in the use of Gen Al tools Craft prompts using best practices, such as understanding when to use zero shot, one shot, or domain-based prompting techniques, to generate specific outputs. Design of prompts should also incorporate basic anonymization techniques, such as data masking

Understands the underlying concepts and theoretical frameworks of Gen Al

Implements basic Gen Al use - cases to support in everyday tasks (e.g., administrative, research), and optimizes prompts to increase the quality of outputs

Ethical and Responsible Gen Al Adoption:

tasks, and generate innovative solutions.

Gen Al principles and applications:

This crucial aspect highlights the responsibility that comes with wielding powerful AI tools. The ethical implementation of Gen AI is fundamental. This encompasses understanding and adhering to ethical guidelines for developing and deploying Gen AI, ensuring fairness, transparency, and accountability. Being familiar with and complying with established governance frameworks and legal standards surrounding data privacy, intellectual property, and responsible use of AI is also essential.

Understands basic ethical principles and governance frameworks related to Gen Al. Can explain the importance of ethics and governance in Gen Al applications

Identifies Gen AI ethics and governance principles as well as processes to apply these in daily activities. Ensures basic compliance with ethical guidelines

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Business user: Knowledge*





Skill name and description

Proficiency level

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Prompt design:

Crafting effective prompts is an art and a science. It's the key to unlocking the potential of Gen AI models by providing clear instructions and context. This involves formulating specific, well-defined prompts that guide the Gen Al model toward generating the desired outputs, as well as iteratively adjusting and improving prompts based on the Al's responses, ensuring clarity and precision in the communication loop.

Concept of prompt design

Techniques in prompt construction. Impact of prompts on AI outputs, recognizing potential areas for improvements. Principles of how prompts shape AI-generated content

Gen Al principles and applications:

This skill emphasizes the need to understand the underlying mechanisms and potential applications of Gen Al. It involves understanding the basics—grasping how Gen AI models work, their strengths, limitations, and potential biases. Identifying use cases is also a part of this skill. This includes recognizing opportunities where Gen AI tools can be effectively implemented to optimize workflows, automate tasks, and generate innovative solutions.

Gen AI as a subset of AI focusing on content creation. Fundamental purpose of Gen Al. Transformative potential of Gen AI in Financial Services sector.

Difference between Gen AI and other Al paradigms. Basic limitations of Al models in generating contextually relevant outputs. Fundamentals of Responsible AI

Ethical and Responsible Gen Al Adoption:

This crucial aspect highlights the responsibility that comes with wielding powerful AI tools. The ethical implementation of Gen AI is fundamental. This encompasses understanding and adhering to ethical guidelines for developing and deploying Gen AI, ensuring fairness, transparency, and accountability. Being familiar with and complying with established governance frameworks and legal standards surrounding data privacy, intellectual property, and responsible use of AI is also essential.

Ethical principles in Al. Responsible Al principles and best practices for development and deployment. Ethical considerations and potential risks of Gen Al interaction

Importance of ethical considerations in AI development, such as bias, privacy, and transparency. Implications of biased AI algorithms and potential societal impact. Ethical frameworks and guidelines for Gen Al-powered tools

The Skills Framework (SFw) that SkillsFuture Singapore uses is moving towards categorizing skills' proficiency levels as "Basic", "Intermediate" and "Advanced," and new Gen Al skills will be categorized in the same way. The proficiency level scores assigned to the new Gen Al skills here can be broadly mapped as Basic (levels 1-2), Intermediate (levels 3-4), and Advanced (levels 5-6).

Business user: Abilities*





Sk	ill	name	and	descri	ntion

Proficiency level

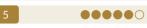














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Prompt design:

Crafting effective prompts is an art and a science. It's the key to unlocking the potential of Gen AI models by providing clear instructions and context. This involves formulating specific, well-defined prompts that guide the Gen AI model toward generating the desired outputs, as well as iteratively adjusting and improving prompts based on the Al's responses, ensuring clarity and precision in the communication loop.

Define the fundamental elements of a prompt. Define negative prompting

Compare prompt designs and best practices for designing effective prompts. Describe fundamental prompt design techniques (e.g., and chain-ofthought prompting). Identify

corresponding AI outputs. Identify common prompt misuses and risks

Gen AI principles and applications:

This skill emphasizes the need to understand the underlying mechanisms and potential applications of Gen Al. It involves understanding the basics—grasping how Gen AI models work, their strengths, limitations, and potential biases. Identifying use cases is also a part of this skill. This includes recognizing opportunities where Gen AI tools can be effectively implemented to optimize workflows, automate tasks, and generate innovative solutions.

Apply Gen AI concepts in practical scenarios, such as recognizing when AI generated content is useful

Give prompts and observe the corresponding AI-generated outputs. Analyze the effectiveness of Gen Al outputs for specific tasks. Consider responsible AI aspects of application of Gen AI

Ethical and Responsible Gen Al Adoption:

This crucial aspect highlights the responsibility that comes with wielding powerful AI tools. The ethical implementation of Gen AI is fundamental. This encompasses understanding and adhering to ethical guidelines for developing and deploying Gen AI, ensuring fairness, transparency, and accountability. Being familiar with and complying with established governance frameworks and legal standards surrounding data privacy, intellectual property, and responsible use of AI is also essential.

Apply ethical principles in decision-making related to AI. Exercise professional skepticism to exercise sound judgement on Gen Al output

Apply ethical guidelines to Al development, considering fairness, accountability, and transparency. Analyze the ethical implications of Al algorithms, assessing bias and fairness concerns. Analyze the impact of AI on different societal groups and cultures

The Skills Framework (SFw) that SkillsFuture Singapore uses is moving towards categorizing skills' proficiency levels as "Basic", "Intermediate" and "Advanced," and new Gen Al skills will be categorized in the same way. The proficiency level scores assigned to the new Gen Al skills here can be broadly mapped as Basic (levels 1-2), Intermediate (levels 3-4), and Advanced (levels 5-6).