

Advanced Generative AI Development on AWS

Prix : 2 390 €HT

Durée : 3 jours

Code de Référence : AWSADAI

Catalogue Amazon Web Services, Architecture AWS, SysOps, Développement

The Advanced Generative AI Development on AWS is designed for developers seeking to master the implementation of production-ready generative AI solutions on AWS. The course addresses the needs of organizations embarking on their generative AI journey and how to build comprehensive generative AI strategies that align with broader business objectives.

Objectifs de la formation

A l'issue de cette formation AWS, vous serez capable de :

- Develop production-ready generative AI solutions using AWS services that meet enterprise requirements for security, scalability, and reliability
- Evaluate and select appropriate foundation models for specific business use cases, including benchmarking performance and implementing dynamic model selection architectures
- Design and implement resilient foundation model systems with circuit breakers, cross-region deployment, and graceful degradation strategies
- Build comprehensive data processing pipelines for multi-modal inputs, including validation workflows and optimization techniques
- Implement sophisticated vector database solutions using Amazon Bedrock Knowledge Bases, OpenSearch, and hybrid approaches for effective retrieval augmentation
- Create and manage advanced prompt engineering frameworks, including chain-of-thought reasoning and enterprise-wide prompt governance systems
- Explain components of Agentic AI frameworks and Amazon Bedrock AgentCore
- Implement comprehensive AI safety and security controls, including content filtering, privacy preservation, and adversarial testing mechanisms
- Optimize performance and manage costs through token efficiency strategies, batching implementations, and intelligent caching systems
- Design and implement comprehensive monitoring and observability solutions for foundation model applications
- Create systematic testing and validation frameworks for continuous quality assurance of AI applications
- Integrate generative AI solutions within enterprise environments using secure, compliant, and scalable architectural patterns

Public

Cette formation s'adresse aux analystes business, support informatique, professionnels du marketing, gestionnaires de produits ou de projets, chefs d'entreprise ou responsables informatiques, commerciaux IT

Prérequis

We recommend that attendees of this course have the following experience:

- [Generative AI Essentials](#) or equivalent work experience
- Foundational AWS knowledge and software development experience

Programme de la formation

Foundation Model Selection and Configuration

- Enterprise Foundation Model Evaluation Framework
- Dynamic Model Selection Architectures
- Resilient Foundation Model System Design
- Cost Optimization and Economic Modeling

Advanced Data Processing for Foundation Models

- Comprehensive Data Validation and Quality Assurance
- Multi-modal Data Processing Pipelines
- Input Optimization and Performance Enhancement

Vector Databases and Retrieval Augmentation

- Enterprise Vector Database Architecture
- Advanced Document Processing and Chunking Strategies
- Sophisticated Retrieval System Implementation

Prompt Engineering and Governance

- Advanced prompt engineering frameworks
- Complex prompt orchestration systems
- Enterprise prompt governance and management
- Hands-on lab: Develop conversation pattern with Amazon Bedrock APIs

Implementing Agentic AI Frameworks with Amazon Bedrock AgentCore

- Agentic AI frameworks
- Amazon Bedrock AgentCore

AI Safety and Security

- Comprehensive content safety implementation
- Privacy-preserving ai architecture
- AI governance and compliance frameworks

Performance Optimization and Cost Management

- Token efficiency and cost optimization

- High-performance system architecture
- Intelligent caching systems implementation

Monitoring and Observability for Generative AI

- Foundation model monitoring systems
- Business impact and value measurement
- AI-specific troubleshooting and diagnostics

Testing, Validation, and Continuous Improvement

- Comprehensive AI evaluation frameworks
- Quality assurance and continuous improvement
- RAG system evaluation and optimization

Enterprise Integration Patterns

- Enterprise connectivity and integration architecture
- Secure access and identity management
- Cross-environment and hybrid deployments

Méthodes pédagogiques

Des exercices pratiques et des démonstrations vous permettront de mettre en pratique les notions théoriques présentées.

La dernière version du support de cours, en anglais, vous est transmise par voie dématérialisée. Les cours seront disponibles en ligne pendant 730 jours après leur activation et téléchargeables avec Bookshelf application. Pour y accéder, il est nécessaire de créer un compte eVantage sur evantage.gilmoreglobal.com.

Méthodes d'évaluation des acquis

Afin d'évaluer l'acquisition de vos connaissances et compétences, il vous sera envoyé un formulaire d'auto-évaluation, qui sera à compléter en amont et à l'issue de la formation. Un certificat de réalisation de fin de formation est remis au stagiaire lui permettant de faire valoir le suivi de la formation.

Accompagnement

Vous avez un projet de migration dans le cloud AWS ? Vous souhaitez être accompagné ? KANOPEE peut vous aider et vous répondre à toutes vos questions sur toutes les différentes étapes. Contactez-nous !