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AI

Careers in AI

**INDUSTRY INSIGHTS,
APPLICATIONS,
AND CAREER PATHS**



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INFORMATION SYSTEMS • PUBLIC POLICY • MANAGEMENT





AI Jobs by the Numbers

By **2025**, AI will create **12 million** more jobs than it will replace (source: World Economic Forum)

64 percent of business owners believe AI will increase productivity (source: Forbes)

87 percent of companies use AI because they believe it will give them a competitive advantage (source: MIT Sloan School of Management)

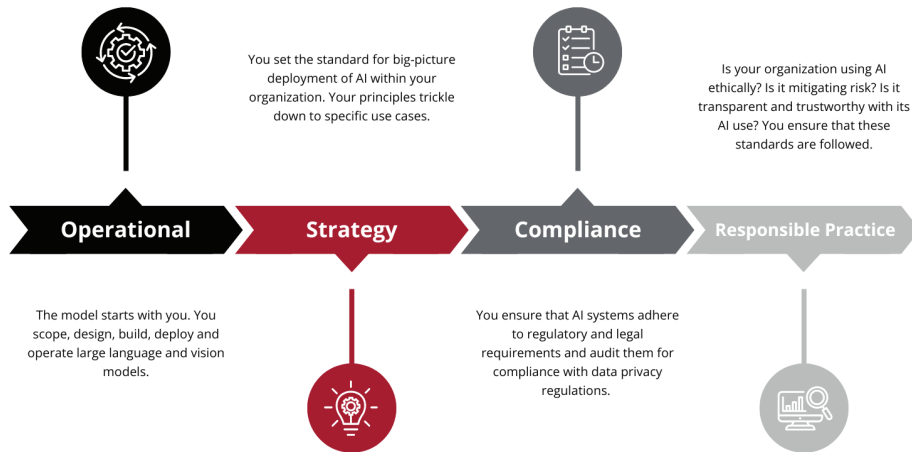
AI could contribute **\$15.7 trillion** to the global economy by **2030**, including **\$3.7 trillion** from North America alone (source: PwC)

The number of CEOs identifying AI as one of their top two business priorities increased **20 percent** between **2023** and **2024** (source: Gartner)



Curious about careers in AI?

Here's what you need to know:



An Insider's Look at AI

AI cuts across our daily lives, from business to finance to health care to entertainment to security and privacy to policy. The question is not only where in the AI lifecycle do you fit; the question is also, in what industry or sector will you bring AI to bear? No matter the industry, the AI used to improve it must be safe, effective, trustworthy, transparent and unbiased. Those traits begin at problem formulation on the front end; are ensured throughout development; and red-teamed, tested and recorded on the back end. This is how we leverage AI for good.







Straight From the White House

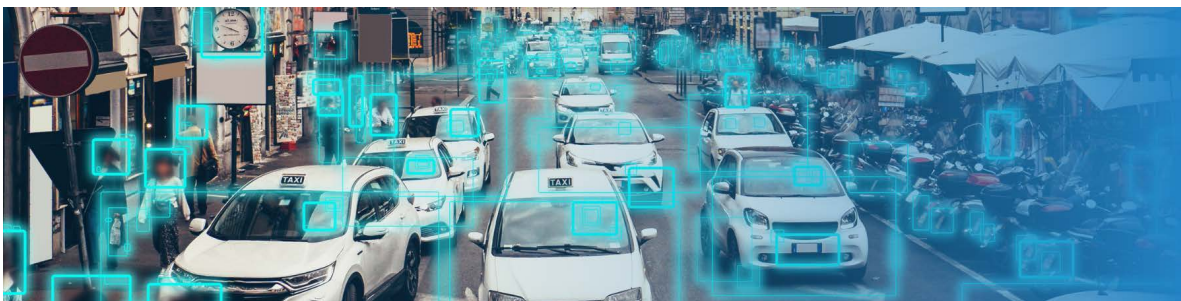
The White House issued an executive order in October 2023 that called for, among other things, the attraction and recruiting of top AI talent and the commitment to promoting innovation in AI. The federal government's investment in AI, as well as that of the private sector (more start-ups raised first-time capital in the U.S. in 2022 than in the next seven countries combined) point toward a robust future for work in AI.

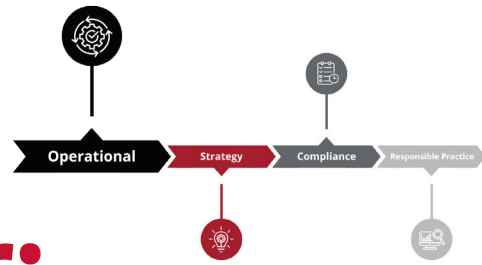


How is AI Changing Work?

TURNING INDUSTRY SPECIALISTS INTO AI LEADERS

Industry	Role	Use Case
 Manufacturing	AI Engineer	Predictive Maintenance: Review data from machinery sensors to predict failures before they occur, reducing downtime and maintenance costs.
 Entertainment	AI Strategy Analyst in Media	Content Recommendation: Suggest personalized content to users based on their viewing history and preferences, enhancing user engagement.
 Finance	AI Compliance Manager	Fraud Detection: Find unusual patterns and anomalies in transaction data to identify and prevent fraudulent activities in real time.
 Health Care	AI Health Care Specialist	Medical Imaging Analysis: Analyze medical images to detect diseases with high accuracy, aiding in early diagnosis and treatment.





AI Engineer:

From Idea to Implementation

AI Engineer

Description



Join a leading global bank as an AI Engineer to spearhead innovative projects in financial AI. This role focuses on leveraging AI to enhance the customer experience, operational efficiency, and risk management by developing and integrating AI solutions into the bank's systems. You will be part of a dynamic team driving advancements in AI and machine learning.

Roles & Responsibilities



- Design, develop and deploy AI models for banking applications.
- Integrate AI technologies into existing financial systems.
- Collaborate with product managers, data engineers, and financial analysts.
- Optimize AI models based on performance metrics and feedback.
- Document AI model development processes and mentor junior team members.



Required Qualifications



- Proficiency in Python programming for AI and machine learning applications.
- Experience with TensorFlow, PyTorch, and similar ML frameworks.
- Strong background in developing and optimizing AI models for banking.
- Familiarity with Azure, AWS, or Google Cloud for AI deployment.
- Minimum of five years of relevant experience in AI and machine learning.

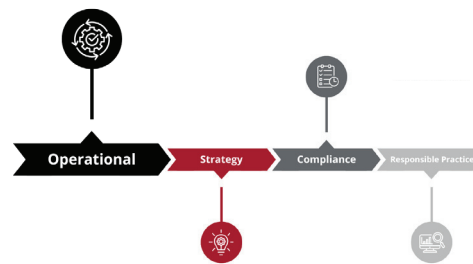


Preferred Qualifications

- Proficiency in financial AI technologies like fraud detection and credit scoring models.
- Experience with Financial Service LLMs, NLP, GANs, etc.
- Familiarity with DevOps and CI/CD pipelines in financial settings.
- Experience with core banking systems like FIS, Temenos, or Fiserv.
- Advanced degrees (M.S., Ph.D.) in AI, Machine Learning, or related fields.

As an AI Engineer, you will integrate roles of Product Owner, Data Scientist, ML Engineer, ML Ops, Data Engineer and ML Architect to design, deploy and optimize AI solutions.





AI Analyst: Comprehensive Integration

AI Analyst

Description

Join a leading global bank as an AI Analyst to drive innovative AI projects in the financial sector. This role focuses on developing AI use cases, building Generative AI Canvases, and integrating AI solutions into the bank's systems. You will be the primary interface between business domain experts and technical teams, ensuring seamless AI implementation.

Roles & Responsibilities

- Define, document and analyze current-state processes in process maps and workflow diagrams.
- Gather requirements, obtain sign-off from stakeholders and manage documentation throughout the project lifecycle.
- Develop and design AI models, algorithms, and technical solutions to address business problems.
- Build AI and Generative AI Canvases to visualize AI projects and strategies.

Required Qualifications

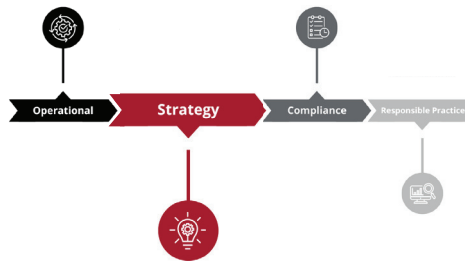
- Bachelor's degree in Business, Technology, Computer Science, Engineering, or related disciplines.
- Two-plus years of experience in business analysis, gathering, documenting, and obtaining sign-off on business requirements.
- Proficiency in SQL, data exploratory tools, and frameworks such as Azure ML and Google Cloud AI.
- Excellent communication and teamwork skills.

Preferred Qualifications

- Proficiency in specific AI technologies such as NLP, LLMs and Conversational AI.
- Experience in the financial services industry, with knowledge of banking operations, compliance, and regulations.
- Strong leadership and negotiation skills with experience in mentoring junior team members.
- Experience with robotic process automation (RPA) and tools like UI path.
- Familiarity with DevOps practices and continuous integration/continuous deployment (CI/CD) pipelines.



As an AI Analyst, you will combine roles of Business Analyst, Data Scientist, and AI Developer to develop, implement and optimize AI solutions that enhance business operations and decision-making processes.



AI Innovation: Building the Future

AI Innovation Lead

Description

Join an exciting fintech start-up as an AI Innovation Lead to manage AI projects in the financial sector. Your role will involve research, development, and implementation of AI-driven initiatives to enhance business processes, products, and services. You'll be at the forefront of cutting-edge technology, driving transformative solutions that advance the fintech sector.

Roles & Responsibilities

- Develop and design AI models, algorithms, and technical solutions to address business problems.
- Build AI and Generative AI Canvases to visualize AI projects and strategies.
- Integrate AI solutions into existing financial systems and iterate, tracking growth and progress.
- Optimize AI models based on performance metrics and feedback.
- Collaborate with financial analysts and business leads.

As an AI Innovation Lead, you will spearhead your organization's advancement in AI, ensuring that AI adds business value at all levels of the company.

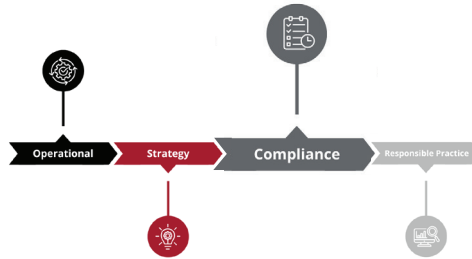
Required Qualifications

- Proficiency in Python programming for AI and machine learning applications.
- Strong background in developing and optimizing AI models for banking.
- Proficiency in SQL, data exploratory tools, and frameworks such as Azure ML and Google Cloud AI.
- Excellent communication and teamwork skills.
- Minimum of five years of relevant experience in AI and machine learning.

Preferred Qualifications

- Proficiency in specific AI technologies such as NLP, LLMs and Conversational AI.
- Experience with financial service LLMs, GANs, etc.
- Strong leadership and negotiation skills with experience in mentoring junior team members.
- Advanced degrees (M.S., Ph.D.) in AI, machine learning, or related fields.
- Familiarity with DevOps practices and continuous integration/continuous deployment (CI/CD) pipelines.





AI Governance Analyst: Safe and Equitable Innovation

AI Governance Analyst

Description

Join a leading global investment bank headquartered in London as an AI Governance Analyst to drive innovative projects in AI governance and compliance. This role focuses on developing and implementing robust AI governance frameworks to enhance operational efficiency, ensure regulatory compliance, and mitigate risks.

Roles & Responsibilities

- Develop, implement and maintain comprehensive AI governance policies and frameworks to ensure responsible and ethical AI use.
- Perform regular risk assessments of AI systems to identify potential vulnerabilities and develop mitigation strategies.
- Work closely with Legal, Compliance, HR, Product, and other departments to ensure adoption of AI governance policies.



Required Qualifications



- Extensive knowledge and experience in developing and implementing AI governance policies and ensuring compliance with regulatory standards.
- Strong understanding and experience in conducting risk assessments, identifying vulnerabilities, and implementing mitigation strategies.
- Excellent ability to communicate complex AI governance concepts.

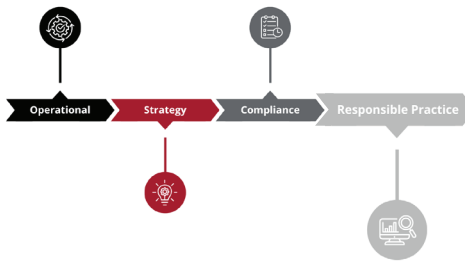


Preferred Qualifications

- Certifications such as CISSP or CISM.
- Proven experience in the financial services industry, providing industry-specific AI governance expertise.
- In-depth understanding of global AI regulations and standards, ensuring compliance with diverse regulatory environments.
- Advanced degrees (M.S., Ph.D.) in relevant fields such as AI, Machine Learning, Data Science, or related disciplines.
- Practical experience in implementing AI solutions, conducting AI risk assessments, and managing AI governance frameworks.

As an AI Governance Analyst, you will develop and enforce AI governance policies, conduct risk assessments, and ensure compliance with ethical and regulatory standards. You will leverage skills acquired in policy development, risk management, regulatory compliance, data privacy, and cross-functional collaboration.





AI Ethicist:

Equity and safety, start to finish

As an AI Ethicist, you will work to eliminate bias in AI models and help them adhere to the values of society. Your work begins at problem formulation and continues throughout the development, deployment and evaluation processes.



AI Ethicist

Description

Join a leading global lending institution as an AI Ethicist and ensure the fair and equitable implementation of AI. You'll study the impact of AI implementation and direct responsible AI development. By identifying and mitigating the risks associated with AI, you'll help your organization use AI for good.

Roles & Responsibilities

- Create comprehensive guidelines and policies that direct responsible AI development.
- Shape the trajectory of AI development, ensuring ethical principles are integral to the design process.
- Prevent biases in AI systems, ensuring they reflect societal norms and values.
- Navigate complex AI-related rules and standards, ensuring legal compliance.

Required Qualifications

- Extensive knowledge and experience in developing and implementing AI ethics policies and ensuring compliance with regulatory standards.
- Strong understanding and experience in conducting risk assessments, identifying vulnerabilities, and implementing mitigation strategies.
- Excellent ability to communicate complex AI governance concepts.

Preferred Qualifications

- At least three years of professional experience in an AI ethics-related role.
- In-depth understanding of global AI regulations and standards, ensuring compliance with diverse regulatory environments.
- Advanced degrees (M.S., Ph.D.) in relevant fields such as AI, Machine Learning, Data Science, or related disciplines.
- Demonstrable understanding of ethical implications of AI, machine learning, and data governance.



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