AI Enterprise Workflow Certification
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Let's talk about AI Skills….

Skills in the era of AI!

"Ginni Rometty: AI To Change 100% Of Jobs Within The Next 5-10 Years"
Building the Workforce of the Future Conference in New York

"IBM CEO Ginni Rometty said companies have to change the way they hire, or the **skills** gap will become a crisis"

World Economic Forum's 2019 annual meeting in Davos

"I believe that 100% of jobs will change in the era of AI and that productivity gains resulting from these technologies will ultimately create more jobs than they replace. The priority right now is to help people around the world prepare for these jobs and benefit more from the prosperity that new technology creates"
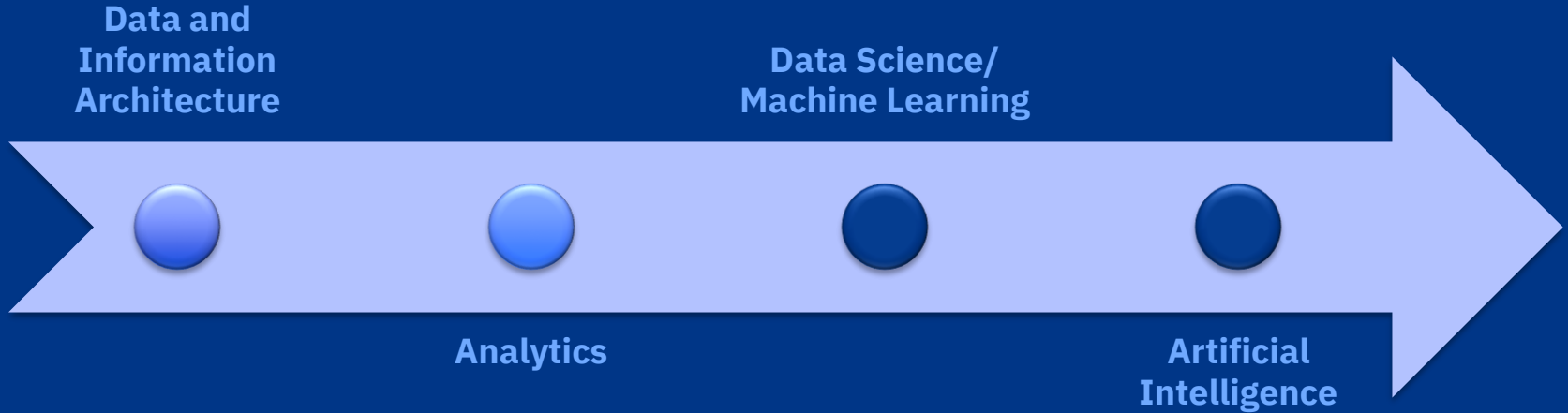
Ginni Rometty at CES

Why it matters…..

"Today, 63% of executives cite a shortage of talent as a top barrier to adopting ai technology"

McKinsey & Company projects that demand for deep analytical professionals could exceed the supply by 140,000 to 190,000 positions in the United States alone, noting that this supply constraint will be global. source
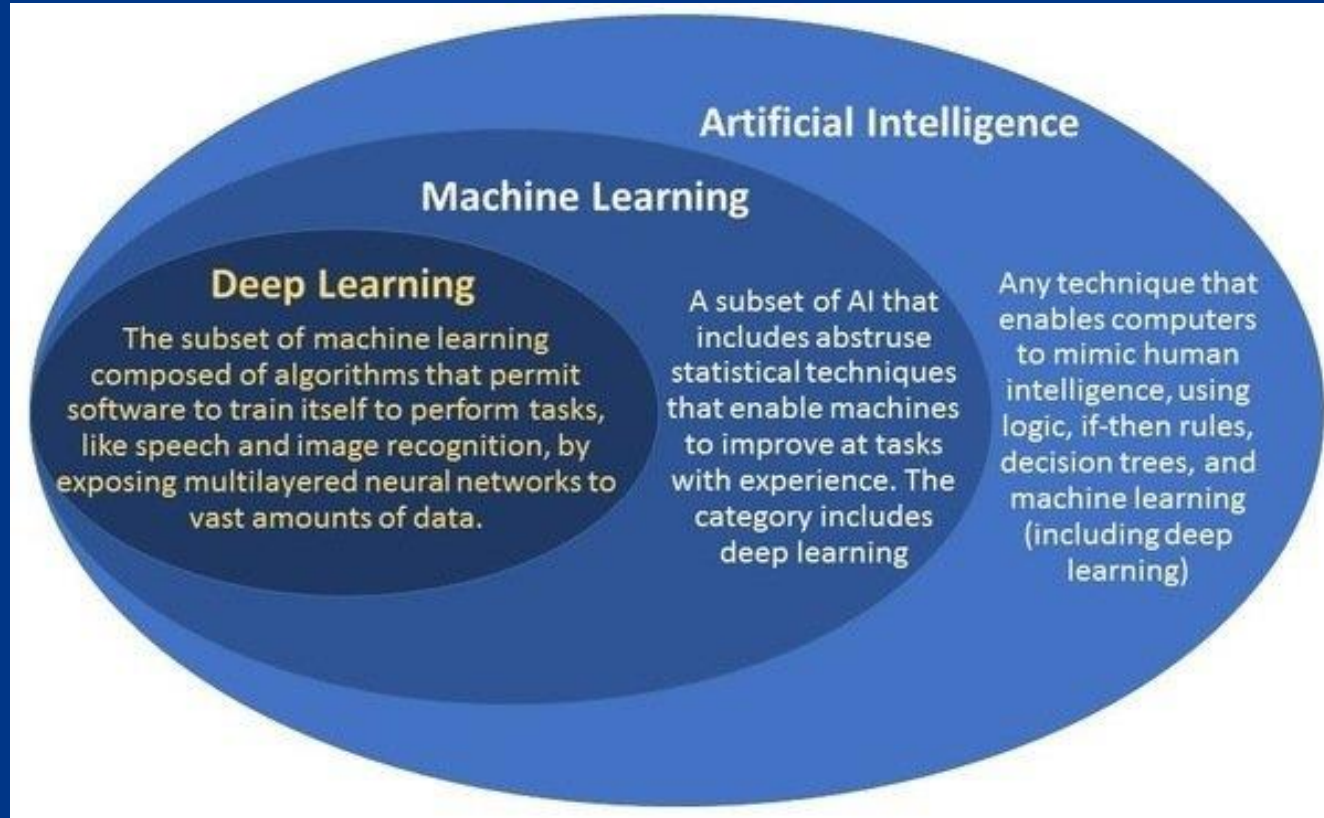
On the road to AI, a continuum of skills is essential

Data and Information Architecture

Analytics

Data Science/ Machine Learning

Artificial Intelligence

Skills development in DS, ML and AI are strategic in preparation for a world of embedded AI

New skills are required beyond "Learning a new product"

Relevant Machine Learning/AI Skills Competencies

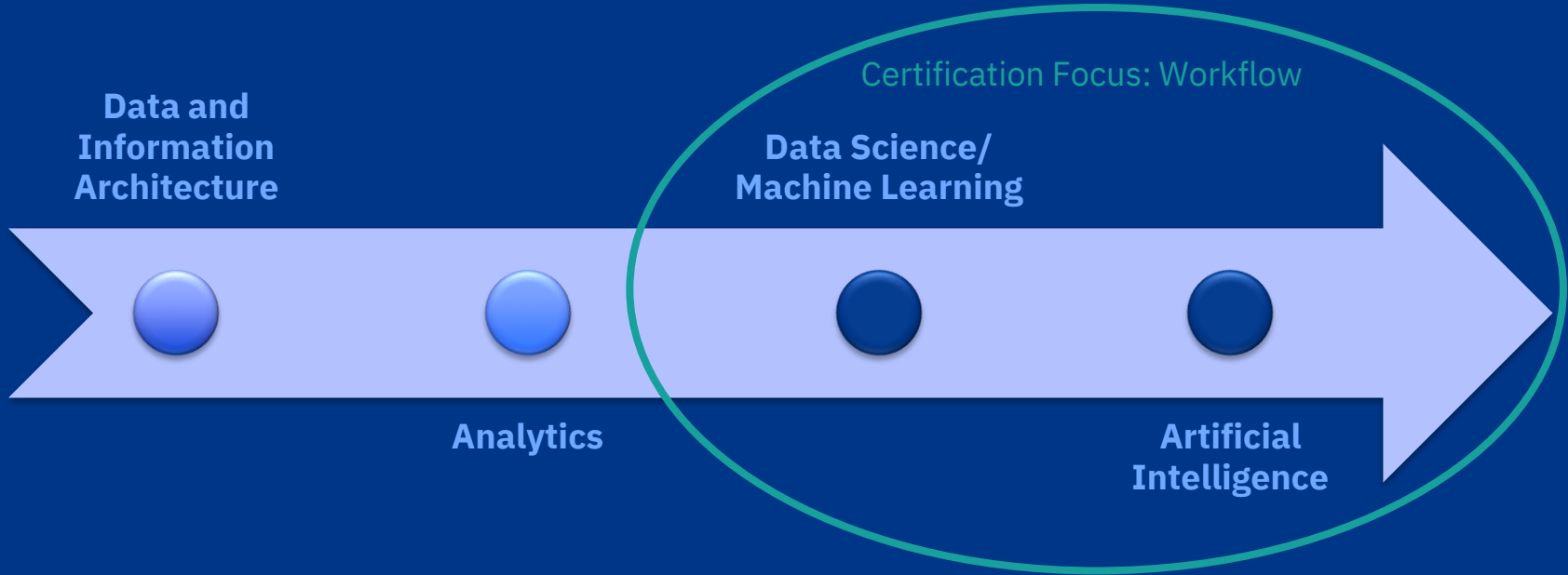| Probability, Statistics, Linear Algebra	Computer Programming/Visual Tools	Data Science Methodologies	Data Preparation
Model Building (Supervised/Unsupervised/Deep/Reinforcement)	Model Use - prebuilt Models	Model Deployment	Big Data
Visual Recognition	Text Processing	Speech Recognition	Tone/Empathy

Refresh / Acquire

What is a Certification?
Not to be confused with a Badge or a Certificate

Badges	Certificates	Certifications
Digital representation of knowledge, skill or an activity	Represents the completion of a learning path around a specific job role.	Recognition tied to real- world experience within a job role or with a specific product/solution.
Obtained after an educational process	Obtained after an educational process	Obtained after a third party Proctored assessment process
Recognition for skills / validation & shareability	Recognition for skills that are valued in key job roles	Recognition for deep skills within a solution or product area. Valued by hiring managers

On the road to AI, a continuum of skills is essential

Data and
Information
Architecture

Analytics

Certification Focus: Workflow

Data Science/
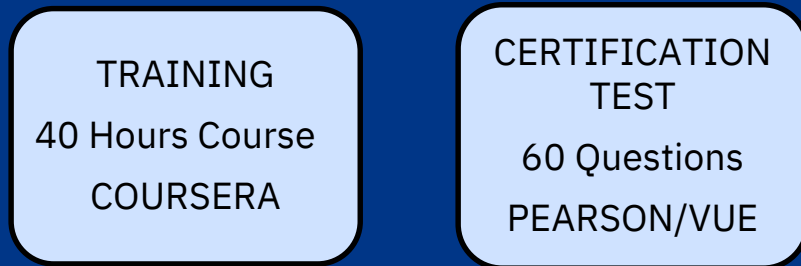Machine Learning

Artificial
Intelligence

AI Enterprise Workflow Certification

Audience:
Machine Learning Practitioners / Experienced Data Scientists

- Using a use case/real world scenario to build an end to end AI solution
- Leveraging Design Thinking to facilitate translation of business goals into AI technical implementations
- Machine Learning + and specific narrow-AI functionality
- Leveraging python + IBM Technologies

TRAINING

40 Hours Course

COURSERA

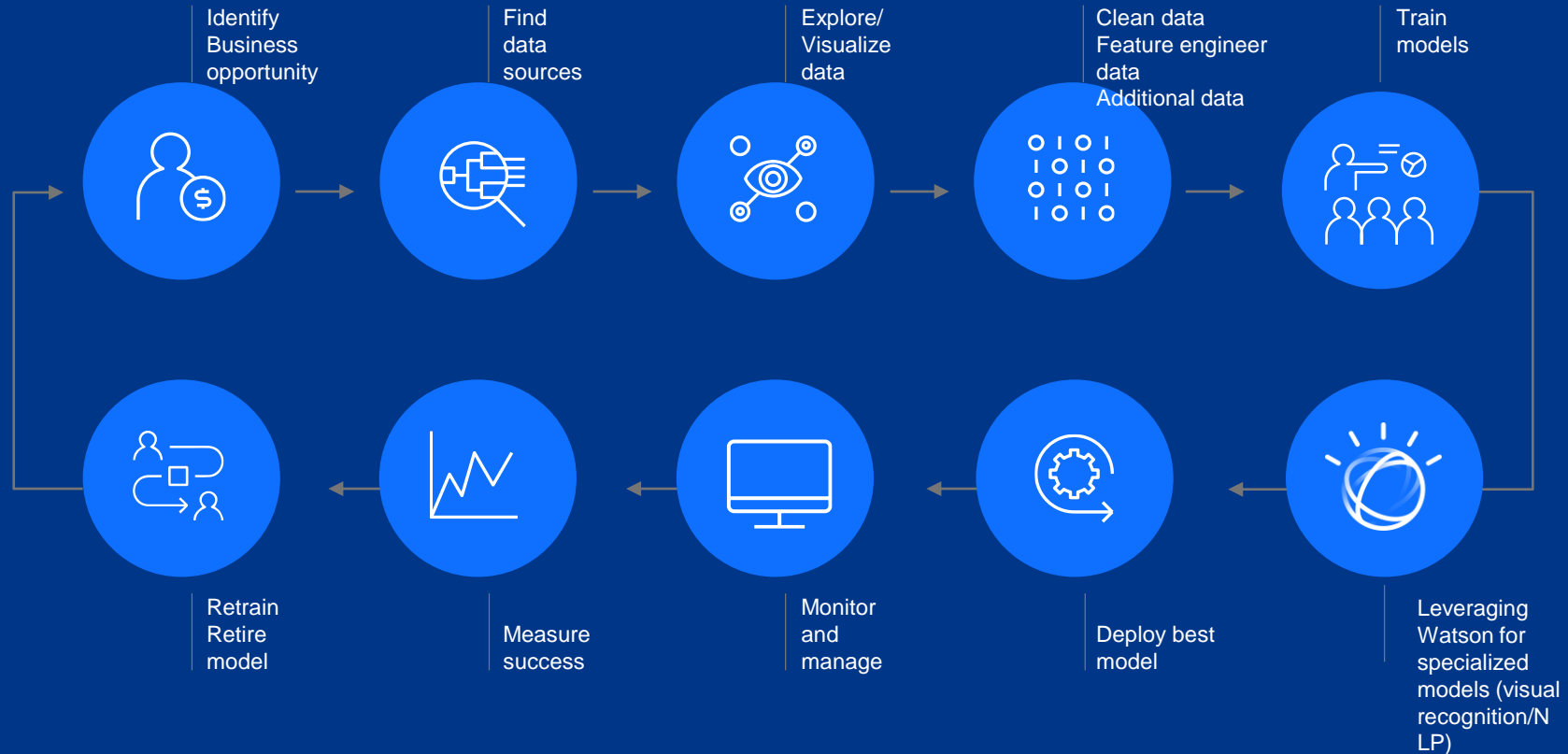CERTIFICATION TEST

60 Questions

PEARSON/VUE

Prerequisites

- Fundamental understanding of Linear Algebra
- Understand sampling, probability theory, and probability distributions
- Knowledge of descriptive and inferential statistical concepts
- General understanding of machine learning techniques and best practices
- Practiced understanding of Python and the packages commonly used in data science: NumPy, Pandas, matplotlib, scikit-learn
- Familiarity with IBM Watson Studio
- Familiarity with the design thinking process

AI Enterprise Process
Grounded in Design Thinking using a Real World Scenario

Identify Business opportunity

Find data sources

Explore/ Visualize data

Clean data Feature engineer data Additional data

Train models

Retrain Retire model

Measure success

Monitor and manage

Deploy best model

Leveraging Watson for specialized models (visual recognition/NLP)

IBM AI Enterprise Workflow Courses on Coursera

AI Workflow: Business Priorities and Data Ingestion

AI Workflow: Data Analysis and Hypothesis Testing

AI Workflow: Feature Engineering and Bias Detection

AI Workflow: Machine Learning, Visual Recognition and NLP

AI Workflow: Enterprise Model Deployment

AI Workflow: AI in Production

https://www.coursera.org/specializations/ibm-ai-workflow

IBM AI Enterprise Workflow Certification (Pearson/Vue)

Scientific, Mathematical, and technical essentials for Data Science & AI

Applications of Data Science & AI in Business

Data understanding techniques in Data Science & AI

Data preparation techniques in Data Science and AI

Data Science and AI techniques and models

Evaluation of AI models

Deployment of AI models

Technology Stack

https://www.ibm.com/certify/cert?id=C0004400

Getting Started

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Aspiring Data Scientists

Beginner

- IBM Data Science Specialization

- Applied AI

Intermediate

- Advanced Data Science Specialization

Advanced/ Experienced Practitioners

- AI Enterprise Workflow Specialization

- Join AI Learning Community
  https://ibm.biz/AILearnCommunity

and get a complimentary month of

coursera

- Learn:
  https://www.coursera.org/specializations/ibm-ai-workflow
- Certification Test:
  https://www.ibm.com/certify/cert?id=C0004400