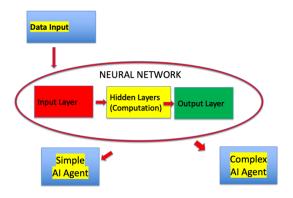


## OK, NOW PAST BASICS AND ONTO YOUR CAREER







Al Implementation Expert



Add AI technical expertise to your degree

Become a NextGen Al Entrepreneur

Gig Economy vs. Corporate



## NEXT GEN AI CAREER PATHS



- •Al literacy is now as essential as computer literacy was a generation ago.
- Learning early gives students a competitive edge college, career, and creativity.
- Parents can learn alongside their kids to understand how Al tools are reshaping work and education.

Suggest starting with two end to end learning platforms for ease of moving forward .....



#### Start with Free Al Introductions



### 1 Google

- •Breadth: Covers everything from entry-level awareness (AI Essentials) to professional certifications (Machine Learning, Data Analytics, Cloud AI).
- •Strength: Structured learning paths through Coursera and Google Cloud Skills Boost, with clear, job-ready credentials.
- •Best use for families: The *AI Essentials* and *Digital Garage* content approachable, visual, short-form, and free.

### 2 OpenAl

- •Breadth: Great for *hands-on* learning people actually use ChatGPT to understand prompting, reasoning, and creativity.
- •Strength: Ongoing free materials on OpenAl Learn mini-modules on prompting, reasoning, ethics, and safe Al use.
- •Best use for families: Practicing together with ChatGPT or GPT-4 Tutor prompts builds real-world skill fast.







- •Understand *prompt* → *response* → *reflection*: experiment and verify.
- Learn safe use: bias / accuracy / plagiarism / privacy.
- •Practice challenge: ask ChatGPT or Gemini to summarize your favorite topic, then refine the answer.

To best Master AI, you must MASTER prompting .... Learn all you can

Prompt Engineering for ChatGPT (Vanderbilt University via Coursera



#### Free Al Introductions



- •Google Al Essentials (free)
- https://www.coursera.org/learn/google-ai-essentials
- → 4 hours, self-paced; clear overview of AI concepts and ethics.
- •DeepLearning.AI ChatGPT Prompt Engineering for Beginners (free)
- https://www.deeplearning.ai/short-courses/chatgpt-prompt-engineering-for-beginners/
- → 1 hour; learn how to "talk" to AI tools.
- •Elements of Al (University of Helsinki & Reaktor) (free, global)

https://www.elementsofai.com

→ 10–15 hours; great for teens and parents together.



# How These Programs Are Being Received



- Over 1 million students worldwide have completed free Al literacy courses like Elements of Al.
- •Schools in India & China embed AI modules into STEM curricula from grade 9 onward.
- •U.S. parents and teachers are beginning to adopt these programs as independent learning options.

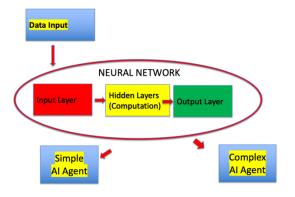
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Link: <u>UNESCO 2025 AI Education Report Summary</u>





#### **Several Paths to Take**





Al Implementation Expert



Add AI technical expertise to your degree

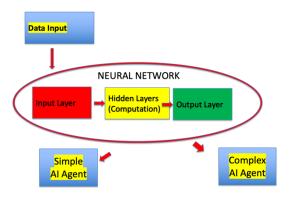
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#### **AI Technical Expert'**



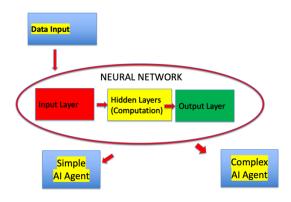
Deep technical skills in Artificial Intelligence, Data Science, or Robotics

In high demand now — and demand will continue to grow

Employers need specialists who can build, improve, and manage Al systems







AGENTIC AI ORCHESTRATION LAYER
(LLM + Reasoning + Workflow Agents)

Human Resources Sys Financial System Manufacturing Syste Sales / CRM System

#### **Al Implementation Expert**

Fastest growing DEMAND in Business ... whether big

Or small business

Requires understanding of traditional Business Systems as well AI Agents and how they can interact ..

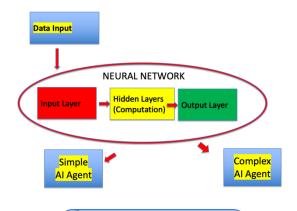
Workflow / Authentications / Actions all required between systems

How AI works WITH Humans ... not Replace









BUSINESS
ENGINEERING
EDUCATION
LIBERAL ARTS
HEALTHCARE
SCIENCES

- Business major: Use AI for market research, customer segmentation, and financial modeling
- Education major: Build AI tutoring apps or homework helpers that personalize learning
- Engineering major: Use AI to prototype designs, test simulations, or optimize energy use



## Why Al Certifications Matter



Al certifications provide structured, credible pathways to build both technical and applied skills:

Validate your understanding of machine learning, data, and automation.

Show employers you can design or implement real-world Al systems.

Differentiate yourself in a rapidly evolving job market.

Gain credentials from trusted institutions (Google, Microsoft, IBM, Stanford, etc.).





# How Certifications Translate to Real Al Capabilities

- Al certifications focus on both design and implementation tracks:
- \*\*Design Track:\*\* Learn to architect AI systems define data inputs, model structure, and performance goals.
- \*\*Implementation Track:\*\* Learn to deploy AI models, integrate APIs, and use tools like TensorFlow, PyTorch, or Azure AI.





# AI Certifications (U.S.) — Design, Build, and Implement AI

Current key certifications in the U.S.

 Organized by Design Al Engines, Design Al Agents, and Implementing Al.

 For a deeper search, students can use ChatGPT to explore additional programs.



## Design Al Engines — Certifications



- 1. LaGuardia Community College Al Certification Program: foundational courses and specializations in NLP, computer vision, and engineering.
- 2. University of North Texas Graduate Academic Certificate in AI:
   12-hour advanced credential for STEM professionals.
- 3. Harvard Extension School AI Graduate Certificate: deep learning, NLP, and ethics.
- 4. Drexel University Graduate Certificate in Applied AI & ML: practical AI/ML applications for data science and computation.



## Design Al Engines — Certifications



- AWS Certified AI Practitioner foundational knowledge of AI, ML, and AWS tools.
- Certified Artificial Intelligence Engineer (CAIE™) —
  demonstrates design and engineering of AI systems (USAII®).
- Stanford Artificial Intelligence Graduate Certificate —
  academic credential covering AI principles, ML, and robotics.
- NVIDIA Deep Learning Institute Certification practical skills for building and optimizing neural networks.



## Design Al Agents— Certifications



- 1. University of Florida AI Fundamentals Certificate: multidisciplinary foundation in AI and ethics.
- 2. Northwestern University Advanced Graduate Certificate in AI: technical and strategic AI design for industry.
- 3. Artificial Intelligence Board of America (ARTiBA) AiE Certification: validates AI engineering and innovation skills.
- 4. Salesforce Al Associate Credential: practical use of Al tools within the Salesforce ecosystem.



### Design Al Agents



#### Certifications

- Microsoft Certified: Azure AI Engineer Associate builds, manages, and deploys AI services and agents.
- IBM RAG & Agentic AI Professional Certificate focuses on retrieval-augmented generation and AI agent design.
- Google Cloud AI Engineer Certification agent design using Vertex AI and generative models.
- NVIDIA AI Agents & Generative AI Foundations training on agentic architecture and workflow integration.



## Implementing AlCertifications



- 1. George Washington University Graduate Certificate in AI:
   AI deployment and leadership in business contexts.
- 2. NVIDIA AI Certifications: hands-on training for building and optimizing AI models.
- 3. IBM Applied AI Certificate: real-world AI model development with Python and Watson tools.
- 4. Coursera + UC Davis Generative AI for Everyone: teaches responsible implementation and real-world impact.



## Implementing AlCertifications



- Microsoft Certified: Azure AI Fundamentals covers AI, ML, and generative AI concepts in Azure.
- DataCamp AI Fundamentals teaches building, testing, and deploying basic AI models.
- Al Governance Professional (AIGP) focuses on responsible Al deployment and compliance.
- IBM AI Engineering Professional Certificate deep dive into ML pipelines and neural networks.



## Al for Business & Strategy — Certifications



- MIT Sloan AI in Business Strategy executive-level understanding of AI adoption.
- Cornell Certificate in AI Strategy focuses on ethical AI and real-world implementation.
- Harvard Professional AI Program explores data-driven decision-making and business transformation with AI.



#### Galvanize



### Tech Education & Career Transition

- Galvanize offers outcome-driven technology programs focused on software engineering, data science, and AI.
- Programs:
- Full-time (≈12 weeks) or Part-time (≈24 weeks) immersive bootcamps.
- Real-world projects and team-based learning.
- Strong mentorship and career coaching.
- Focus on practical coding, machine learning, and problem-solving skills.



## How Students Can Take the Galvanize Path



- 1. Begin with fundamentals free prep courses in Python, math, and logic.
- 2. Apply to a Galvanize Immersive Program choose Data Science or Software Engineering.
- 3. Complete projects and build a professional portfolio.
- 4. Get career support networking, job-readiness, and interview prep.
- 5. Launch into roles like Data Scientist, Software Engineer, or Al Specialist.
- Galvanize represents a direct path from motivated learner to professional in tech — no traditional degree required.



### Next Steps



- Pick two from each category and research.
- Work with Chat GPT to figure out which may interest you the most.
- Put together a "pathway" that compliments what YOU WANT TO DO