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🚀 Many professionals ask me how they can transition into Artificial Intelligence and Machine Learning or even become a Data Scientist. The good news is there is a clear path to get started.

I like to think of this as 3 roles or even a journey in three growth stages:

👤 User → 🛠️ Developer → 🔬 Researcher

Depending on your background, goals, and curiosity, you can move through these stages or remain where it best serves you. Below/attached is a practical roadmap, especially for Generative AI:

#### 🌟 User Stage

- ✅ Experiment with AI tools for text, images, and video. Apply them to your real-world use cases.
- ✅ Explore low-code and no-code platforms.
- ✅ Learn prompt engineering by defining roles, objectives, context, and constraints.

#### 💡 Developer Stage

- ✅ Strengthen your foundation in mathematics, programming, and ML/DL algorithms.
- ✅ Dive into Retrieval-Augmented Generation (RAG) with frameworks like [LangChain](#) or [LlamaIndex](#).
- ✅ Experiment with fine-tuning using Hugging Face, or no-code solutions such as Ludwig, Vertex AI, or Azure AI Studio.
- ✅ Build automation workflows (🧠 LangGraph), autonomous agents (🤖 AutoGen, CrewAI), and deploy them with safety guardrails.

#### 🔬 Researcher Stage (an aspirational phase for many)

- ✅ Train or fine-tune Large Language Models from scratch.
- ✅ Explore advanced architectures, multi-modal and multi-agent systems.
- ✅ Develop expertise in reinforcement learning, which is key for reasoning-based LLMs.

🏃 This roadmap is not exhaustive, but it is enough to get started. Download and try out links. Let me know any changes or recommendations.

And here's the most important takeaway: ✨ Your degree, location, or background do not define you.

What truly matters is your GitHub repo that's your real resume. 🌈

🔥 The AI transition is not about where you came from, but about what you can build.

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