



AI Career Starter Kit

A beginner-friendly kit covering ML fundamentals, prompt engineering, and AI career paths.

Understanding the AI Job Market

AI roles span a much wider range than "Machine Learning Engineer." Understanding the landscape helps you target the right entry point for your background.

- Machine Learning Engineer — builds and deploys models; requires strong math/programming fundamentals.
- AI Product Manager — bridges business goals and AI capability; product thinking over deep technical skill.
- AI-Enabled Business Analyst / Operations roles — uses AI tools to accelerate traditional analytical work.
- AI Quality & Evaluation Specialist — tests AI outputs for accuracy, bias, and reliability before release.
- AI Implementation Consultant — helps companies adopt AI tools into existing workflows.

Machine Learning Fundamentals to Know

- Supervised vs. unsupervised learning — the basic split of ML problem types.
- Training, validation, and test sets — and why conflating them leads to misleading results.
- Overfitting vs. underfitting — and basic techniques to address each.
- Common evaluation metrics: accuracy, precision, recall, F1 score.
- The basic idea behind large language models (LLMs) and how they generate text.

Prompt Engineering Basics

Good prompting is a skill that compounds across every AI-adjacent role, not just technical ones.

- Be specific about format, tone, and constraints — vague prompts produce vague output.
- Provide examples of the output you want (few-shot prompting) for consistent results.
- Break complex tasks into smaller steps rather than one giant prompt.
- Always verify factual claims in AI output — models can produce confident-sounding errors.

Your First 30 Days

1. Pick one repetitive task

Drafting emails, summarizing articles, or structuring documents — use an AI tool for it daily.

2. Build one small AI-powered project

Even a simple script that calls an AI API programmatically demonstrates real, hands-on experience.



3. Read 3-5 real case studies

Look at where companies successfully — and unsuccessfully — deployed AI features, and note why.

