Advanced AI Career Roadmap (Beyond Prompt Engineering)

(Designed for learners who commented “Prompt” — from the desk of @ankurdecodes)

1. Introduction: Why Prompt Engineering Alone Won't Survive

For the last 2 years, companies hired thousands of "Prompt Engineers" — people who wrote prompts for ChatGPT, Gemini, Claude, etc. But with newer AI models becoming: - More autonomous - More context aware - Better at self-refinement - Capable of zero-prompt task execution Companies have realized: "Why pay someone to type prompts when models can handle it automatically?" This is why millions of prompt-only roles are shrinking. But AI careers are not dying — they are evolving. The real opportunity now lies in AI system design, AI product development, MLOps, data engineering

2. Core Foundations You MUST Learn (As Mentioned in Video)

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1 : Machine Learning (ML)

Learn: - Supervised/unsupervised learning - Regression, classification - Clustering - Feature engineering Model evaluation

2 : Artificial Intelligence (AI)

Learn: - Neural networks - RNN, CNN, Transformers - LLMs basics - Inference pipelines

3 : Data Structures

Essential for AI system design and engineering roles: - Arrays, stacks, queues - Trees & graphs - Hashmaps Time/space complexity basics

4 : AI Ethics

Companies need experts who understand: - Bias detection - Ethical model use - Responsible AI guidelines Data privacy

5 : Model Finetuning

Learn: - How to finetune LLMs - Embeddings - Vector databases - Prompt templates - RAG pipelines These are the skills that create real value — not just typing prompts

3. High-Paying AI Career Paths (The REAL Future Roles)

The video mentions roles that are replacing "prompt engineers." Here is the roadmap for each

1. AI Solution Architect:

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Skills Needed:

- ML/DL basics
- API integration
- Cloud (AWS/Azure/GCP)
- RAG systems
- Understanding business workflows

2. MLOps Engineer:

The video mentions roles that are replacing "prompt engineers." Here is the roadmap for each

Skills Needed:

- ML/DL basics
- API integration
- Cloud (AWS/Azure/GCP)
- RAG systems
- Understanding business workflows
- Model monitoring
- Python + cloud deployment

3. AI Product Manager

Build AI-powered products for end users.

Skills Needed:

- User research
- Product strategy
- Data analytics
- Prompt design + LLM understanding
- A/B testing, user funnels

4. AI Security Specialist

Protect AI systems from attacks.

Skills Needed:

- Cybersecurity basics
- Prompt injection defense
- Model poisoning detection
- Secure data pipelines

5. LLM Engineer

Work with large language models

Skills Needed:

- Python
- NLP
- Model finetuning
- Tokenization
- Vector databases (FAISS/Chroma)
- RAG systems

6. AI Automation Engineer

Build automation using AI workflows

Skills Needed:

- Zapier/Make
- Python scripting 3
- API orchestration
- Prompt engineering (advanced)

4. Step-by-Step Roadmap (Beginner → Expert)

Step 1: Foundations (1–2 Months)

- Python
- Data Structures basics
- Mathematics for ML
- SQL

Step 2: Machine Learning + AI Basics (2–3 Months)

- ML algorithms
- Neural networks
- CNN/RNN basics
- Model pipelines
- Mini projects

Step 3: Deep Learning + LLMs (1–2 Months)

- Transformers
- Tokenization
- Attention mechanism
- LLM architecture basicscts

Step 4: Model Finetuning & RAG (1 Month))

- Llama finetuning
- QLoRA
- Embedding models
- Vector
- DBs RAG workflows

Step 5: Specialization (Based on Career Path)

Choose one: - AI Solution Architect - MLOps Engineer - AI Product Manager - AI Security Specialist - LLM Engineer

Step 6: Build Projects & Portfolio (1 Month)

Project Ideas:

- RAG-based chatbot
- Automated AI agent
- Fraud detection model
- Personal recommendation system
- Custom finetuned LLM
-

Upload to GitHub + portfolio site

Step 7: Apply for Jobs

- LinkedIn
- Instahyre
- Naukri
- AngelList
- RemoteOK

Target roles: - AI Engineer - ML Engineer - LLM Engineer - AI Automation Engineer - AI Product Associate MLOps Intern/Engineer

5. Tools You Must Learn (2025 Updated)

AI Tools

- ChatGPT
- Claude
- Gemini
- OpenAI Studio

Development Tools

- Jupyter
- VS Code
- PyTorch
- TensorFlow

MLOps Tools

- MLflow
- Docker
- Kubernetes
- Weights & Biases

Bonus Tip:
To explore trending tools from all fields — AI, ML, data, automation — use platforms like Techyuni.com or its Chrome extension for quick access to hundreds of tools in one click

6. 6–8 Month Learning Timeline

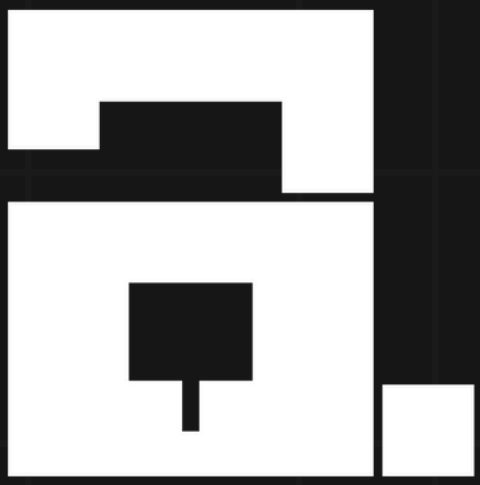
- Months 1–2: Python + DS + ML basics
- Months 3–4: Deep learning + AI fundamentals
- Months 5–6: LLMs + finetuning + RAG
- Months 7–8: Specialization + portfolio + job applications

7. Final Advice from @ankurdecodes

- Prompt engineering is useful — but not enough
- Build real AI skills that companies value
- Work on practical AI problems
- Learn system design, not just prompt writing
- Stay updated — AI changes every month

8. Your Next Step

You received this roadmap because you commented "Prompt".
If you follow this structured path, you can build a stable, high-paying AI career in the fields that truly matter in 2025 and beyond.
For more guides, tech insights, career breakdowns, and AI knowledge — follow @ankurdecodes. Stay future-ready. Your AI journey begins today.



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