

Special thanks!

This roadmap was created by [Maria Vechtomova](#) from [Marvelous MLOps](#) . Do check them out!

This roadmap is meant for beginners. If you are transitioning from DataScience/DevOps background you might skip some parts.

Related Roadmaps

- ✓ AI and Data Scientist Roadmap
- ✓ DevOps Roadmap
- ✓ Backend Roadmap

Find the detailed version of this roadmap along with resources and other roadmaps

[https:// roadmap.sh](https://roadmap.sh)

MLOps

Programming Fundamentals

Python

Bash

Version Control Systems

Git

GitHub

Cloud Computing

AWS / Azure / GCP

Cloud-native ML Services

Containerization

Docker

Kubernetes

Data Engineering Fundamentals

Data Pipelines

Data lakes & Warehouses

Spark / Airflow / Kafka

Machine Learning Fundamentals

MLOps Principles

MLOps Components

Infrastructure as Code

Version Control

CI / CD

Orchestration

Experiment Tracking and Model Registry

Data Lineage and Feature Stores

Model Training and Serving

Monitoring and Observability

Keep Learning

ML vs MLOps Engineers

ML engineers develop models; MLOps engineers deploy and manage them in production, ensuring reliability and scalability.