

Software Engineering with Machine Learning



- Why is it Important?
- Required Skillset?
- How to Learn?

Watch Full Video



Software Engineering with Machine Learning = Software Engineering + Machine Learning & Deep Learning Skills

Software Engineering with Machine Learning

Complete Roadmap



Python Proficiency:

Basic, Loops, Functions, OOP, Data Structures, Error Handling

Web Development:

Django / FastAPI, REST API, Authentication, ORM

Dev Tools:

- Git (Version Control), Docker (Containerization)
- GitHub Actions (CI/CD)

Machine Learning & DL: (Watch)

- Linear Algebra & Statistics
- scikit-learn, pandas, numpy, TensorFlow, PyTorch, Model serving via API

API Performance & Security:

- Low latency, Error handling
- Token Auth, Rate limiting

Software Engineering with Machine Learning

Complete Roadmap



Database Knowledge:

- PostgreSQL (Django), MongoDB (FastAPI)
- ORM integration

Deployment:

- Dockerized apps on Render, Railway, AWS
- Redis & Celery for async tasks

Courses:

- Backend API Development with Python
- Data Science & Machine Learning with Python
- Deep Learning & Generative Al