

AI/ML Simulator for Product Managers

COURSE PROGRAM · 6 BLOCKS · 10 CHAPTERS

BLOCK 01 · 1 CHAPTER

Fundamental Principles of Machine Learning

KEY TOPICS

- What are fundamental concepts, principles, and problems in machine learning
- How AI creates value for businesses
- Key ideas behind generative AI and large language models

PROJECTS

- Creating initial versions of ML models for each of the projects

CHAPTERS

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| 01 | Typical problems and basic concepts of machine learning and artificial intelligence |
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Evaluating the Quality of ML Models and Their Impact on Business

KEY TOPICS

- What are model quality metrics and why it is important to evaluate them
- What are business metrics and how do they relate to model quality metrics
- How to evaluate the impact of the model on business metrics

PROJECTS

- Choose quality and business metrics for each of the projects

CHAPTERS

02

Evaluating the quality of ML models and their business impact

How to Choose Approaches for Solving AI/ML Problems

KEY TOPICS

- How to explore possible solutions for AI/ML problems
- How to prioritize team efforts

PROJECTS

- Choose specific approaches to solve problems within the projects

CHAPTERS

03

How to approach ML problems

How to Improve the Quality of ML Models

KEY TOPICS

- Tools for diagnosing the causes of poor model quality
- The main levers for improving model quality
- How to create datasets for training and evaluating models
- How to choose the training method for the model
- What is representativeness and model complexity

PROJECTS

- Diagnose model quality issues for each of the projects
- Identify levers to enhance model quality

CHAPTERS

04

Error analysis for ML models

05

How to improve the quality of ML models

Stages of Working on an AI Project

KEY TOPICS

- The importance of problem analysis for defining AI project tasks
- How to assess the product, technical, and economic risks of a project
- How to design and deploy a MVP and a pilot
- How to do an early evaluation of the business impact

PROJECTS

- In-depth examination of the problems addressed within the projects
- Project risk assessment and mitigation planning

CHAPTERS

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| 06 | Meeting the real world |
| 07 | AI/ML project setup. Understanding the problem |
| 08 | Stages of AI/ML project work. Product development and technical risks of an AI/ML project |
| 09 | Economic risks of AI/ML projects |
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Principles of Managing AI Projects

KEY TOPICS

- What are the principles for achieving success in AI projects
- What are the responsibilities of the AI product manager
- Overview of approaches for AI/ML in production

PROJECTS

- Covered throughout the preceding blocks

CHAPTERS

10

Approaches for AI/ML in production

Format: simulator, self-paced

Course duration: ~60 hours

Required knowledge: no programming skills or deep knowledge of mathematics required