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RESILIENT ECONOMIES AND COMMUNITIES

Distance LAB

DISTANCE LAB PILOT: REMOTE LEARNING OPPORTUNITIES AND SKILLS FULFILMENT

Elements of AI Learning Platform

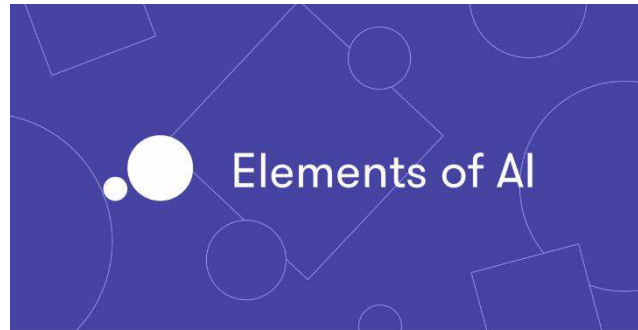


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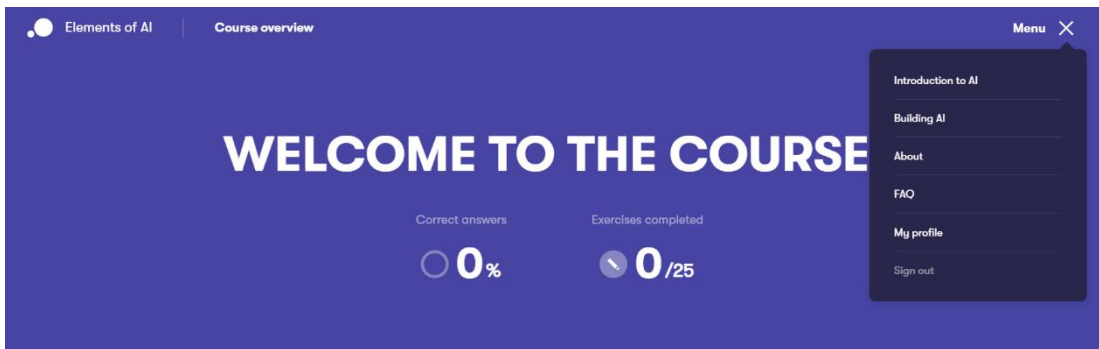
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Elements of AI

[Elements of AI](#) is a learning platform where people from all around the world can learn the basic principles and usage of AI. The platform was first launched in 2018 to educate Finish citizens about AI, and since then, the platform has expanded its reach to global level and updated information on courses. Elements of AI offers two **free-of-charge courses** – [Introduction to AI](#) and [Building AI](#). The courses are available in all official European Union languages and in Austrian, Belgian, Icelandic, Luxembourgish, and Norwegian. After completing the course, it is possible to gain a **certificate of completion**.



To start learning in the Elements of AI platform you first need to [sign up](#). After that, you will be able to log in to your profile and choose which course to learn from the *menu bar*. On the course homepage, you will see statistics of your progress such as *correct answers percentage* and *exercises completed* (See the picture below).



Course content can be seen in chapters that are divided into multiple sections. The chapter is completed when the exercises are passed (see picture below)

Chapter	Section	Exercises
Chapter 1 What is AI?	I. How should we define AI?	0/1
	II. Related fields	0/2
	III. Philosophy of AI	0/1
Chapter 2 AI problem solving	I. Search and problem solving	0/2
	II. Solving problems with AI	---
	III. Search and games	0/1
Chapter 3 Real world AI	I. Odds and probability	0/2
	II. The Bayes rule	0/2
	III. Naive Bayes classification	0/2

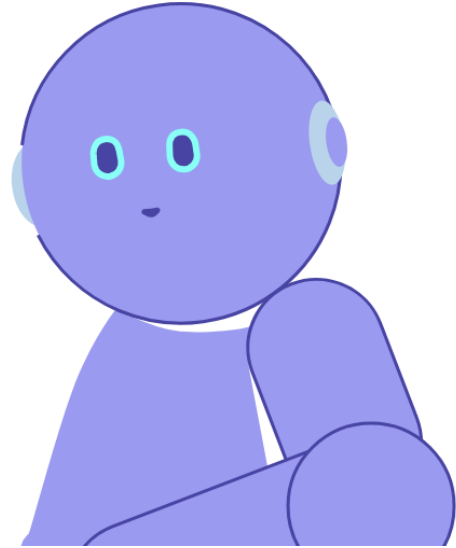
1.1. Elements of AI: Introduction to AI

1.1.1. What the course is about and its format

Introduction to AI is an online learning course dedicated to teaching participants key principles, concepts and ideas about AI, machine learning and neural networks. The goal of this course is to demystify AI.

1.1.2. For whom it is and its difficulty, benefits of the course

The course is for those who have little to no knowledge in AI, machine learning, and neural networks. Participants will understand how AI might affect their job or life, what AI is and how it is created. After completing the course, participants will receive a certificate of course completion that can be shared on LinkedIn and other platforms.



1.1.3. Brief content of the course

The course is divided into 6 chapters and subsequent sections:

1. [What is AI?](#) – I. How should we define AI; II. Related fields; III. Philosophy of AI.
2. [AI problem solving](#) – I. Search and problem solving; II. Solving problems with AI; III. Search and games.
3. [Real world AI](#) – I. Odds and probability; II. The Bayes rule; III. Naive Bayes classification.
4. [Machine learning](#) – I. The types of machine learning; II. The nearest neighbour classifier; III. Regression.
5. [Neural networks](#) – I. Neural network basics; II. How neural networks are built; III. Advanced neural network techniques.
6. [Implications](#) – I. About predicting the future; II. The societal implications of AI; III. Summary

1.1.4. Duration of the course

It is estimated that, to complete the course it takes up to **6 weeks, 5-10 hours a week**.

1.2. Elements of AI: Building AI

1.2.1. What the course is about and its format

[Building AI](#) course is for those who want to learn in a more practical way how to utilize AI technology in reality. Tests after each section and exercises available provide an opportunity for participants to check their knowledge. It is recommended to complete the [Introduction to AI](#) course before starting this one.



1.2.2. For whom it is and its difficulty, benefits of the course

The course is designed for 3 difficulty levels – beginner, intermediate, and advanced. Participants can easily switch from one level to another to get different level of exercises and training. To get the most out of the course, some Python programming skills are recommended.

After completion of the course, you will know how to generate your AI idea and present it. Also, you will have the opportunity to gain certification of course completion.

1.2.3. Brief content of the course

The course consists of 5 chapters and subsequent sections:

1. Getting started with AI – **I.** Why Ai matters; **II.** Optimization; **III.** Hill climbing.
2. Dealing with uncertainty – **I.** Probability fundamentals; **II.** The Bayes Rule; **III.** Naive Bayes classifier.
3. Machine learning – **I.** Linear regression; **II.** The nearest neighbour method; **III.** Working with text; **IV.** Overfitting.
4. Neural networks- **I.** Logistic regression; **II.** From logistic regression to neural networks; **III.** Deep learning.
5. Conclusion – **I.** Summary; **II.** Your AI idea; **III.** Ai idea gallery

1.2.4. Duration of the course

The course completion will take approximately 50 hours.

Disclaimer

This information provided for the Distance Lab project is based on the information, pictures and sources available on the Elements of AI platform (<https://www.elementsofai.com/>). It contains links to other websites or content belonging to or originating from third parties or links to websites. Such external links are not investigated, monitored, or checked for accuracy, adequacy, validity, reliability, availability or completeness by us. We do not warrant, endorse, guarantee, or assume responsibility for the accuracy or reliability of any information offered by third-party websites linked through the site or any website and feature linked in any banner or other advertising, we will not be a party to or in any way be responsible for monitoring any transaction between you and third party providers of products or services.