

Build your own AI powered chatbot without coding

Lecturer: Maria Chiara Debernardi

Language

English

Course description and objectives

Chatbot development offers a valuable skillset for future professionals seeking to enter today's AI-driven job market.

In this course, you will learn how to build an AI-powered chatbot using KNIME, a free and open-source data science platform. You will not need to write any code to complete this course thanks to the versatility of KNIME nodes, which will serve as building blocks for your chatbot. From text preprocessing to open-source Large Language Models adoption, you will learn how to seamlessly assemble these components to create chatbots capable of handling a wide range of tasks in a company.

At the end of the course, participants will be able to:

- create a functional chatbot using KNIME's intuitive interface
- understand the fundamentals of Natural Language Processing and apply them to chatbot development
- integrate LLMs and a company's internal information into your chatbot to improve its conversational abilities

Audience

This course is open to all Bocconi students. It is particularly suited for:

- students who are curious about generative AI and its potential applications in a business context
- those who appreciate the convenience of a no-code approach to AI development
- those who want to understand where conversational generative tools come from

Prerequisites

While no prior coding experience or knowledge of KNIME is required, having completed the Computer Science course (30424) or an equivalent, can provide a significant advantage.

Guidelines

Registration:

You can sign up for the course only through the yoU@B student Diary, in the " **sign-up for various activities**" box (please note that the box appears only when registrations open. Before then it will not be visible).

You can only cancel your registration by Diary **no later** than the registration deadline for the course itself. No other ways of cancellation are allowed.

Registration will be confirmed a few days before the start of the course through a message posted in the yoU@B student Diary.

Attendance:

- Attendance of **75% or more** of class hours: obtainment of the **Open Badge**
- Attendance of **less than 25%** of class hours: **blacklisting**

Duration

10 hours

Teaching Mode

This course will be only taught in person. Distance mode will not be provided.

Calendar

Lecture	Date	Time	Room
1	Thu 07/11/2024	18.15 - 19.45	N30 (Velodromo)
2	Thu 14/11/2024	18.15 - 19.45	N30 (Velodromo)
3	Thu 21/11/2024	18.15 - 19.45	N30 (Velodromo)
4	Wed 27/11/2024	18.15 - 19.45	N30 (Velodromo)
5	Thu 05/12/2024	18.15 - 19.45	N30 (Velodromo)

Syllabus of the course

Lecture	Topics
1	GenAI and chatbots <ul style="list-style-type: none"> - Generative AI: what is it and where does it come from? - Chatbots: origins and developments - Introduction to KNIME

Lecture Topics

2 Under the hood of GenAI: text analysis

- NLP: a gentle full immersion
 - Doing NLP with KNIME
 - Sentiment analysis
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3 Large Language Models

- Intro to LLM models
 - OpenAI and the others
 - Hugging Face and KNIME
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4 AI powered chatbot

- Building a chatbot with KNIME
 - LLM vulnerabilities
 - Retrieval Augmented Generation (RAG) to reduce hallucinations
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5 Adding privacy

- Anonymizing sensitive data
 - GPT4All: local computing
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Software

KNIME Analytics Platform ([knime.com](https://www.knime.com)): latest version available (5.3.2 or higher)

Download it from: [download-knime](#)

Please note that no registration is required, but you must accept the “terms and conditions” of the open-source license (please add the flag!) to download the KNIME version for your laptop’s operative system.

Suggested bibliography

Materials will be provided by the instructor during the course and will be accessible on Blackboard.

Available seats

This activity is limited to **110** participants. Registration cannot be carried out once this number has been reached or after closing the registration period.

Please remember that you may unsubscribe from ITEC courses only before the registration deadline.