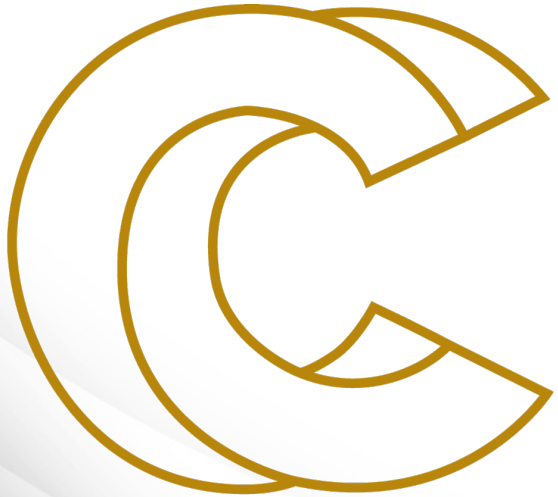
Sabancı Üniversitesi

TÜBİTAK



EURO 4SEE

Prediction of Protein Structures Using Deep Learning Tools

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Welcome to the Course

Meet the Instructor – Tandac Furkan Guclu

- BSc from Hacettepe University Biology Department
- MSc from Marmara University Bioengineering Department
- PhD from Sabancı University Molecular Biology, Genetics and Bioengineering Department
- Currently, works on biophysical basis of mutational effects in proteins

Preknowledge/Prerequisite(s)

- Experience with terminal/command line
- Programming skills in Python.
- General knowledge of protein structures

Course Overview

- Part 1: Multiple sequence alignments
- Part 2: Protein structure prediction
- Part 3: Protein sequence predictions from structure
- Part 4: Protein multimer prediction
- Part 5: Protein–ligand interactions
- Part 6: Protein conformations

What this course is

In this course you will learn

- The relationship between sequence and structure, and its use in prediction
- Advantages and disadvantages of various prediction tools and their applications
- A general understanding of deep learning–based tools for structure prediction

What this course isn’t

In this course you will NOT learn about

- Implementation of deep learning algorithms
- Detailed understanding of tool variables
- In-depth coding for deep learning

Set Up/Configure/Install

Attendees are expected to use online tools and the Google Colab environment.

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Thanks!

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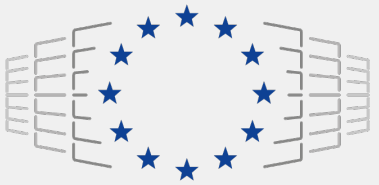

EuroHPC
Joint Undertaking

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