

Technical Vocational School of Higher Education

Course Name: Fundamentals of Machine Learning

Unlock the Magic Behind Spotify, YouTube, and more!

Term: 2024-2025 / Fall Semester

Instructor: Dr. Batuhan BARDAK (batuhanbardak@gmail.com)

Schedule: Wednesday 13:40 – 16:30

Teaching Mode: Face to face

Background: Basic programming skills, mathematics. Linear algebra background is a plus.

Course can be registered as FREE elective or TECHNICAL Elective
(Depending on Department & Faculty Approval)

Students who have taken a similar course and CENG students will not be eligible to register the course.

Exams: In Class

Course Highlights: Dive into the fundamental principles of machine learning, and uncover the foundational knowledge that powers various smart technologies around us.

What You Will Learn:

- Basics of Supervised and Unsupervised Learning: Understanding the difference
- Key Algorithms: Grasping the logic behind Linear Regression, Decision Trees, Ensemble Learning, and more.
- Model Evaluation: How do we know if our model is good?
- Introduction to Neural Networks: A peek into the structure that powers advanced AI.
- **Why This Course:**
 - Equip yourself with foundational knowledge in one of the fastest-growing tech domains.
 - Enhance your problem-solving skills and analytical thinking.
 - Stay ahead in the academic and professional spheres with key insights into modern AI.

Who Should Attend?

This course is tailored for:

- Students, particularly those keen on fortifying their AI and data science proficiencies.

Grading

- Midterm (%20)
- Assignments x 2 (%20)
- Project (%30)
- Final (%30)

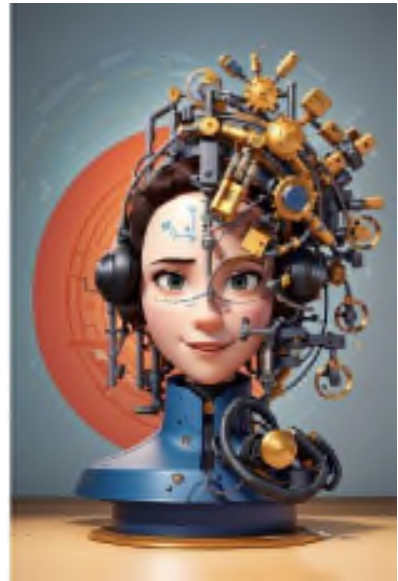


Figure 1 An AI Generated Picture