

Course Name:	Machine Learning: Principles and Practical Applications
Language of Instruction:	English
Course Meeting Time:	July-August 2024 (12 2-hour Sessions)
Course Meeting Place:	Zoom
Instructor:	Dr. Zekiye Sozmen + Dr. Bilgehan Erdem
English Tutoring:	0.5 Hour Before Each Course Session with Tutor

Course Description

This course offers a thorough introduction to machine learning, blending theoretical foundations with practical applications. It is designed to be accessible to students from diverse disciplines, empowering you to master essential concepts and tools.

You will learn to structure machine learning problems, select appropriate algorithmic tools, evaluate solutions using relevant metrics and best practices, and accurately interpret model outputs. Additionally, you will develop skills to effectively communicate your results to interdisciplinary audiences.

Throughout the course, you will participate in hands-on workshops that provide practical experience with machine learning tools and techniques. AI support tools will enhance your learning experience by offering interactive feedback and guidance. These workshops will help you apply theoretical knowledge to real-world problems, ensuring a deep understanding of machine learning concepts and preparing you for practical application or further study.

课程介绍

“机器学习：原理与实际应用”课程全面介绍了机器学习(ML)，融合了理论基础和实际应用。课程设计适合来自不同学科的学生，帮助他们掌握基本概念和工具。

学生将学习如何构建 ML 问题、选择合适的算法工具、使用相关指标和最佳实践评估解决方案，并准确解释模型输出。此外，将培养学生有效向跨学科受众传达结果的能力。

在整个课程中，学生将参与动手工作坊，获得使用 ML 工具和技术的实际经验。AI 支持工具将通过互动反馈和指导增强学生的学习体验。这些工作坊将帮助学生将理论知识应用于现实问题，确保对机器学习概念的深刻理解，并为实际应用或进一步研究做好准备。