Vocational English
III (Mesleki Yabancı
Dil III)
Week 12





Engineering Faculty
Computer Engineering

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This week we will work on

ENGLISH FOR MACHINE LEARNING & READING-LISTENING ACTIVITIES

Machine Learning (noun) →

•Example: "Machine learning is transforming industries through data-driven insights."

Algorithm (noun) \rightarrow

•Example: "The algorithm improves its predictions with each training cycle."

Dataset (noun) →

•Example: "The dataset contains thousands of labelled images for training."

Model (noun) →

•Example: "The model predicts house prices based on historical data."

Training (noun) \rightarrow

•Example: "The training process involves feeding data into the model."

Testing (noun) \rightarrow

•Example: "Testing ensures that the model performs well on unseen data."

Validation (noun) \rightarrow

•Example: "Validation is used to tune hyperparameters for better performance."

Feature (noun) \rightarrow

•Example: "Selecting the right features is crucial for accurate predictions."

Label (noun) →

•Example: "Labels in the dataset help the model learn to classify data."

Supervised Learning (noun) →

•Example: "Supervised learning uses labeled data to train models."

Unsupervised Learning (noun) →

•Example: "Unsupervised learning finds hidden patterns in data without labels."

Reinforcement Learning (noun) →

•Example: "Reinforcement learning trains agents through rewards and penalties."

Neural Network (noun) →

•Example: "A neural network mimics the human brain to solve complex problems."

Deep Learning (noun) →

•Example: "Deep learning algorithms excel in image and speech recognition tasks."

Hyperparameter (noun) →

•Example: "Adjusting hyperparameters can significantly improve model performance."

Overfitting (noun) \rightarrow

•Example: "Overfitting occurs when a model performs well on training data but poorly on testing data."

Underfitting (noun) →

•Example: "Underfitting happens when a model fails to capture the underlying patterns in the data."

Bias (noun) \rightarrow

•Example: "High bias can lead to inaccurate predictions."

Variance (noun) →

•Example: "High variance causes the model to perform inconsistently on different datasets."

Gradient Descent (noun) →

•Example: "Gradient descent minimizes the loss function during training."

Epoch (noun) →

•Example: "One epoch is a complete pass through the entire training dataset."

Loss Function (noun) \rightarrow

•Example: "The loss function measures the difference between predicted and actual values."

Optimization (noun) \rightarrow

•Example: "Optimization algorithms improve model accuracy."

Classification (noun) →

•Example: "Classification models categorize data into predefined classes."

Regression (noun) →

•Example: "Regression models predict continuous values like house prices."

Clustering (noun) →

•Example: "Clustering groups similar data points together."

Decision Tree (noun) →

•Example: "Decision trees are used for both classification and regression tasks."

Random Forest (noun) →

•Example: "Random forests combine multiple decision trees for better accuracy."

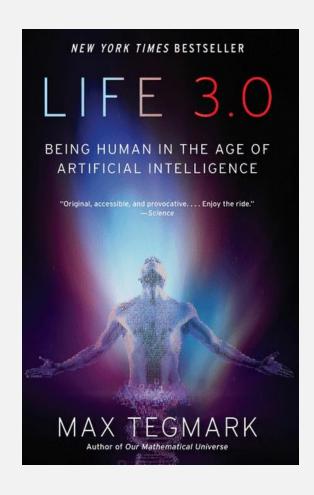
Support Vector Machine (SVM) (noun) →

•Example: "SVM is effective for high-dimensional classification problems."

Prediction (noun) →

•Example: "The model's prediction is based on input data and learned patterns."

BOOK/BLOG RECOMMENDATION



GOOGLE AI BLOG: https://ai.google/latest-news/

OPEN AI BLOG: https://openai.com/news/research/

Towards Data Science PLATFORM: https://towardsdatascience.com/

META AI BLOG: https://ai.meta.com/blog/?page=I

Al NEWS: https://www.marktechpost.com/

APPLE MACHINE LEARNING RESEARCH: https://machinelearning.apple.com/

HUGGING FACE KAGGLE

Massachusetts Institute of Technology: https://news.mit.edu/topic/artificial-intelligence2

LISTENING

BBC LEARNING ENGLISH

MACHINE LEARNING-LISTENING ACTIVITY.

https://128.pl/jJdUn



NO ASSIGNMENT

RECOVERY WEEK!

Send me any previous assignment if you haven't done already!



CREDITS

BBC LEARNING ENGLISH