Natural Language Processing

Exercise – Summer term 2026

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Organization

Communication

- Slides, announcements & materials on the course website [temir.org]
- Questions and communication via Discord and email [discord.gg]
  (please use your full name as the server nickname)

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Organization

Exercise

Tuesday, 14:15 - 15:45, Raum -1605, starting 21.04.2026 [temir.org]

Exercise Sheets

- Mix of theory questions and toy examples
- The tasks are **highly relevant for the exam**
- Task solutions will be discussed in the exercise sessions
- No written solutions will be provided

Programming Exercises

- Published shortly before the exercise
- Jupyter Notebooks that let you work with the NLP hands on
- Don’t need to be submitted

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Getting to know you

Do you have prior experience with. . .

- Natural Language Processing
- Machine Learning
- Deep Learning
- Python
- NLTK
- spaCy
- PyTorch
- Hugging Face
- CNN, RNN, LSTM, Transformer

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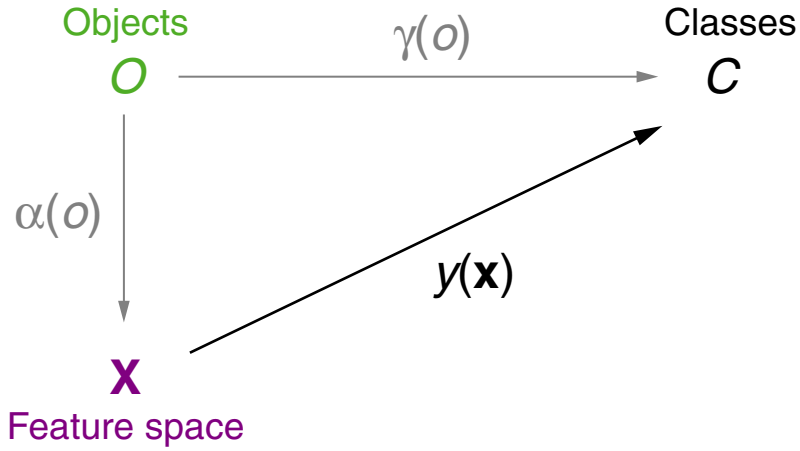
Classification

ML: Real World and Model World [model formation]



- $\gamma(o)$ ideal classifier (e.g., human) for real-world objects
- $\alpha(o)$ model formation function
- $y(\mathbf{x})$ classifier (i.e., model function) to be learned
- What could be features **X** for NLP?

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