

CS 5/7320 Artificial Intelligence

More Important AI Topics

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Online Material

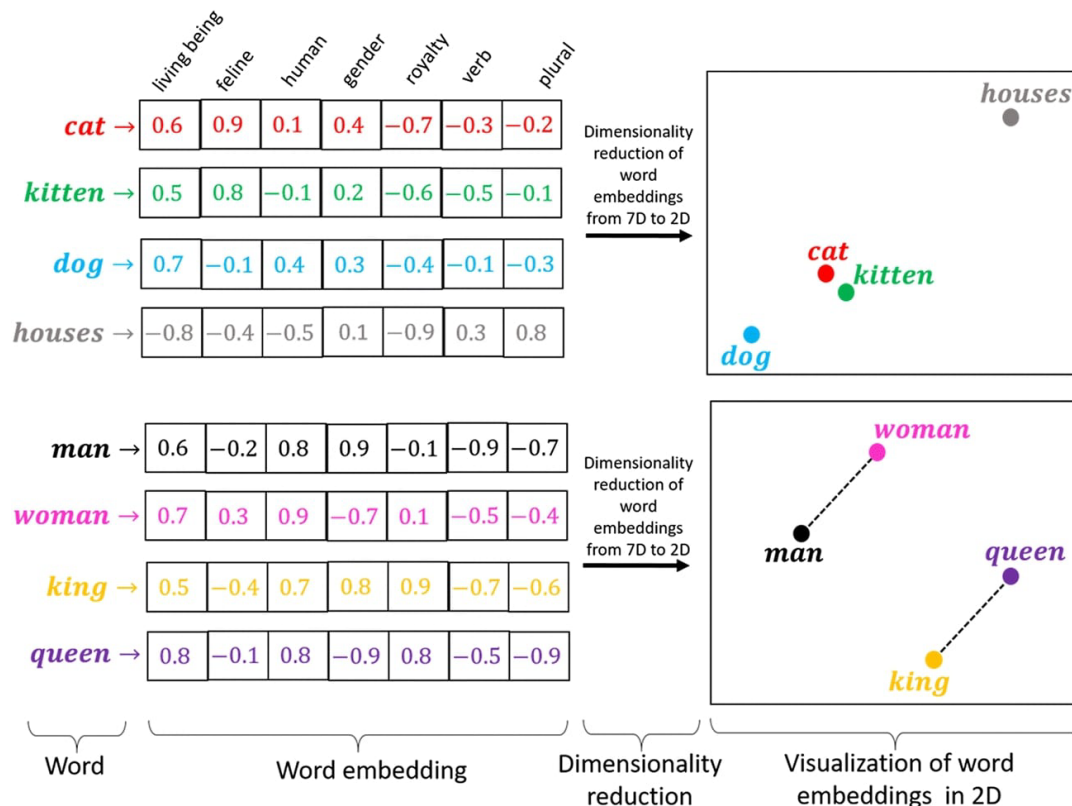
Natural Language Processing (NLP)

Tasks:

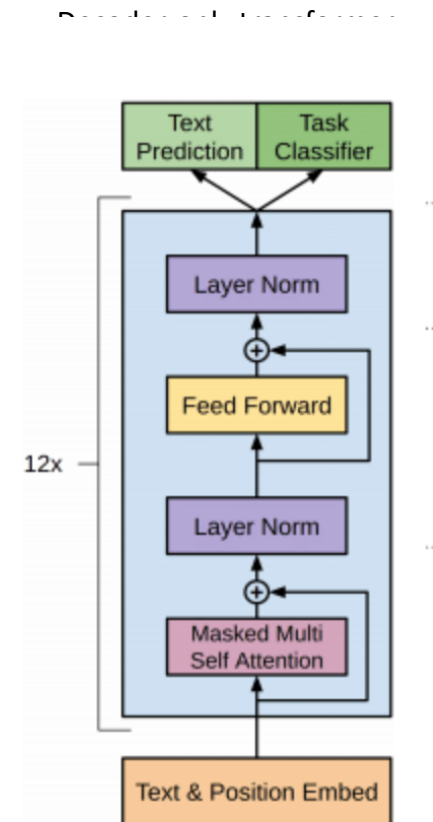
- Speech recognition
- Text classification
- Natural-language understanding
- Natural-language generation.

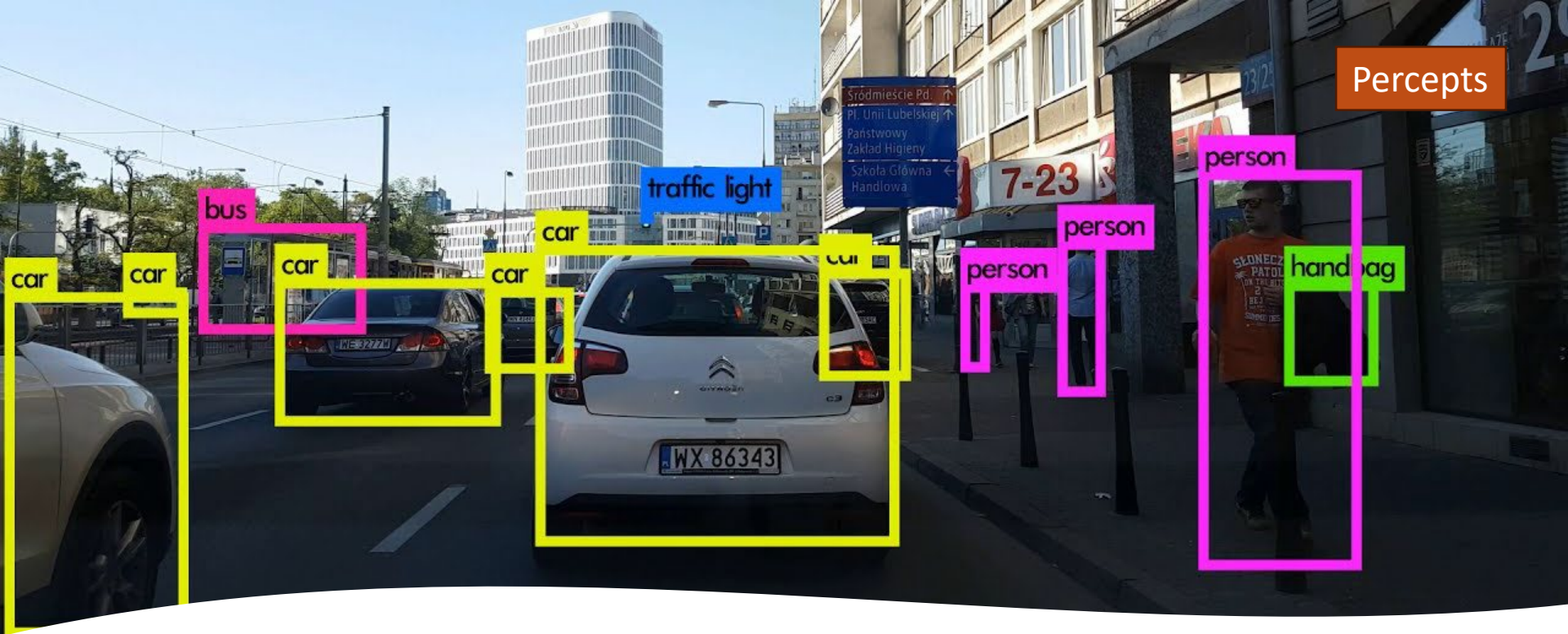
Techniques:

- Text embeddings
- Transformers
- Large language models (LLMs)



Source: [Word Embeddings for PyTorch Text Classification Networks](#)





Computer Vision

- Object detection
 - Event detection
 - Activity recognition
 - Video tracking
 - Object recognition
 - 3D pose estimation
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- Uses Deep Convolutional Neural Networks

Percepts & Actions

Robotics

Hardware, sensors, control theory (feedback-based controllers)



Multiagent Decision Making

Communication and Coordination



Conclusion

AI development is currently moving
at the speed of light!