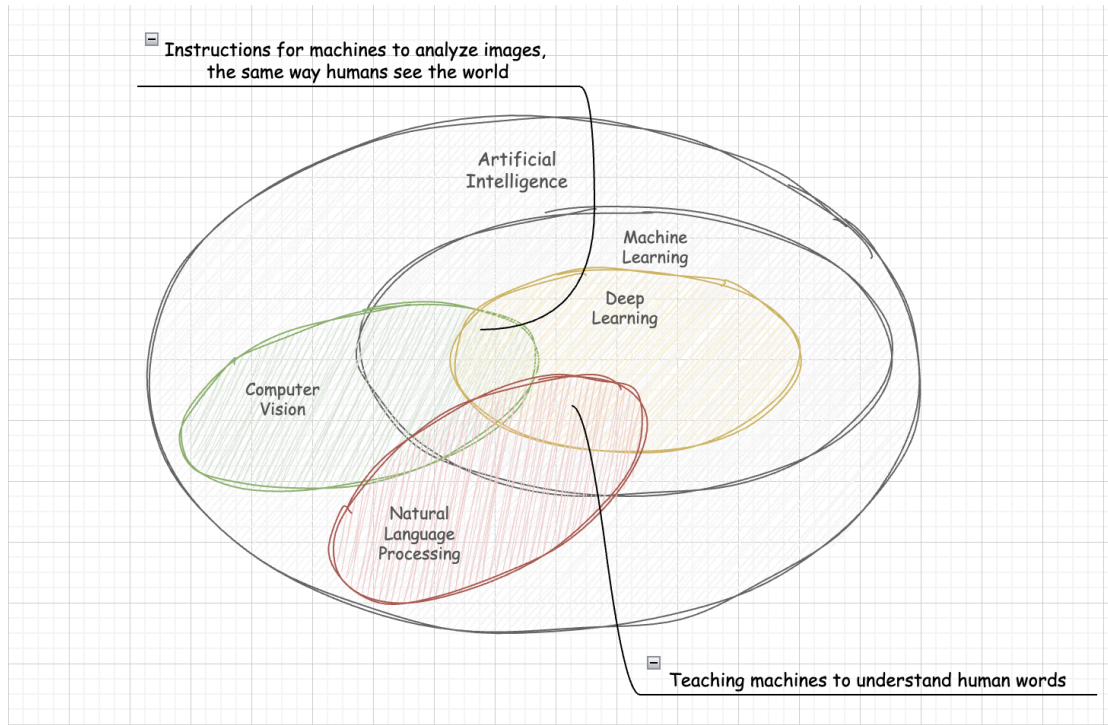


## What I learn at Epita.

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The professor give us the overview about AI, the relationship between all domains.



- **Supervised and unsupervised machine learning algorithms:** Decision Trees, SVM, XGBoost, KNN, K-Means, t-SNE...
- **Model training and evaluation techniques:** Transfer learning, self-supervised learning, underfit/overfit handling, cross-validation, evaluation metrics...
- **Deep Learning:** MLP, perceptron, activation function, forward/backward propagation, loss function, optimization, regularization...
- **Computer vision (CV):** CNN, YOLO, ResNet, UNet, VGG, ViT, image classification, recognition and segmentation problems, Visual QA...
- **Multimodal and GenAI:** cross-attention, CLIP, Stable Diffusion, GAN...
- **Natural language processing (NLP):** Word embeddings, seq2seq, transformer, attention, machine translation, text classification, fine-tuning large models (LLM)...

# Neural Networks and Deep Learning in Python

CNN

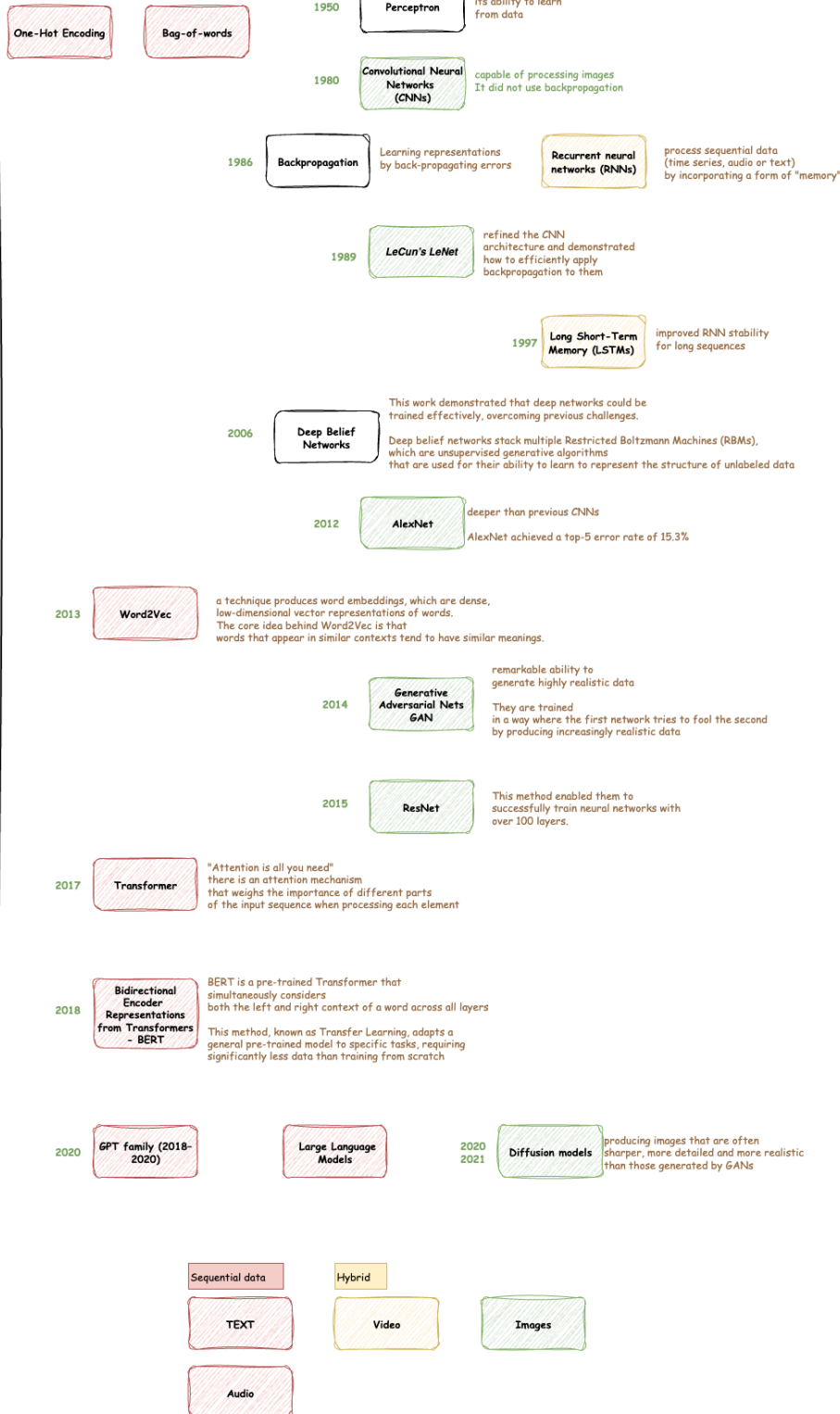
RNN

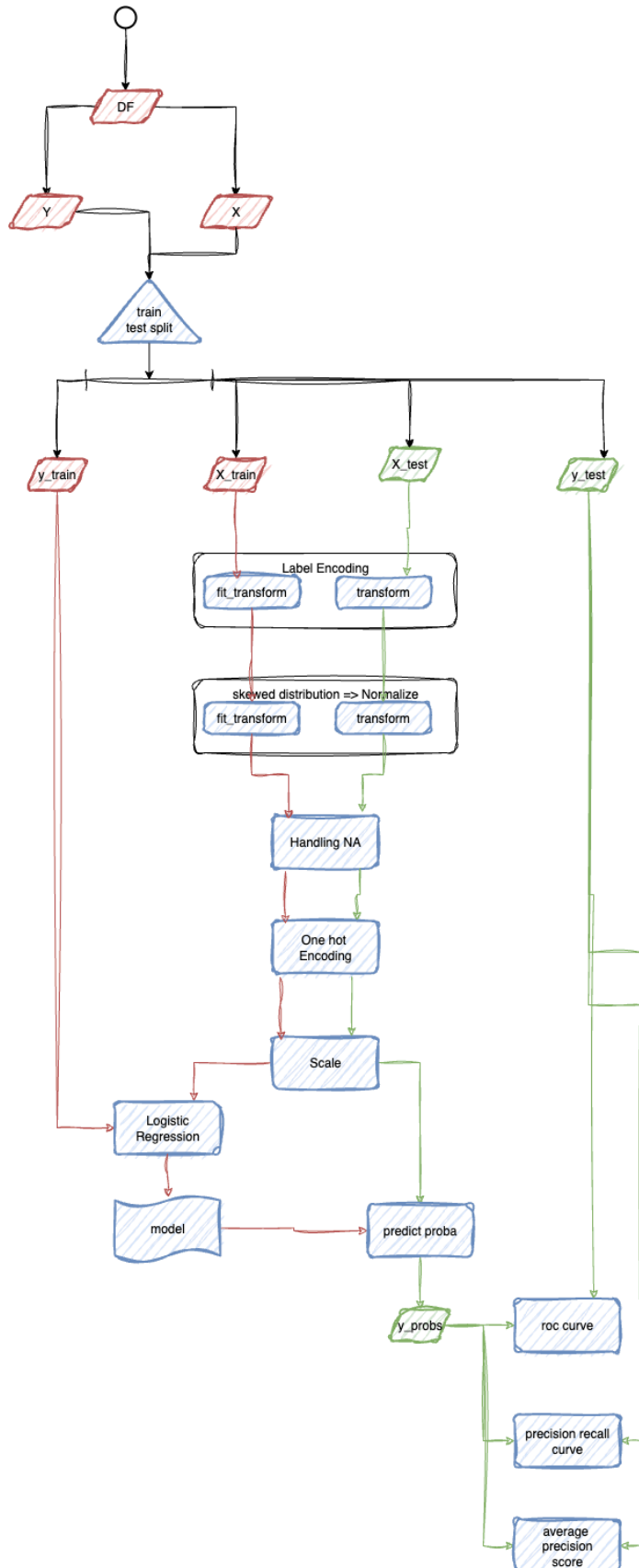
LSTM

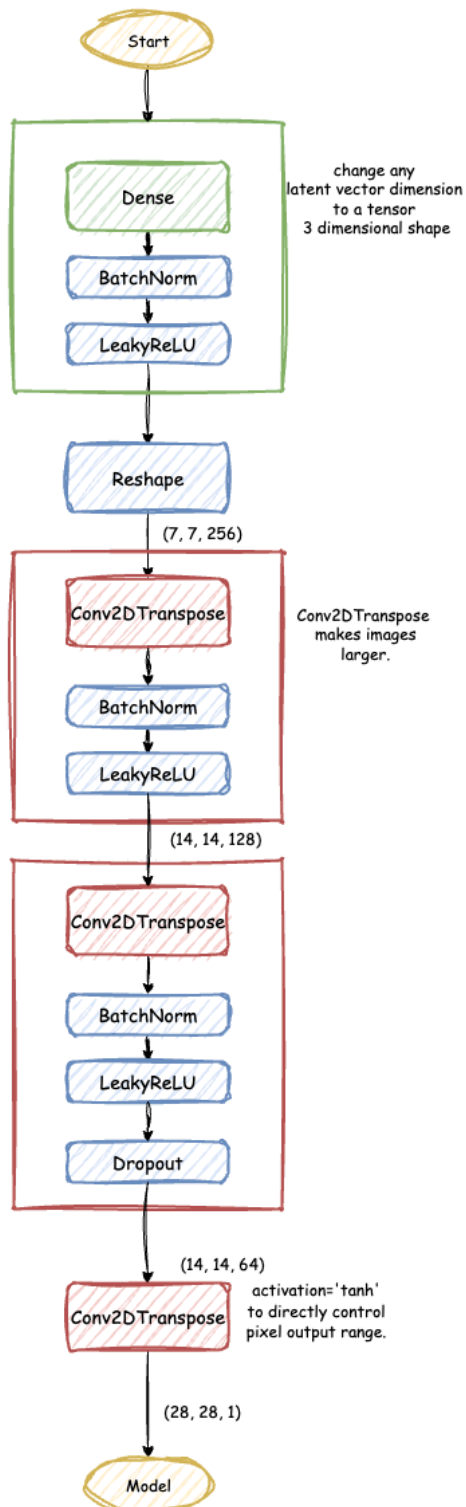
Trans

BERT

GPT





Generator model using  
Keras Sequential APIDiscriminator model using  
Keras Sequential API