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| **Techniques** | **Projects Used In** |
| CLIP | Flower-Classification (1a,1b,1c,2) |
| Clustering | MNIST (3a), PDF-Estimation (2) |
| Cross Validation | Penguin (2) |
| Data Augmentation | MNIST (1f, 2b), Next-Day-Temperature (1e), Pets-Classification (0a) |
| Data Compression | MNIST (4c) |
| Decision Tree | Next-Day-Temperature (2a), Penguin (1b) |
| Discrete PDF (Histogram) | PDF-Estimation (1,4) |
| Faiss | MNIST (3b, 4b), PDF-Estimation (2) |
| Fast Retrieval | MNIST (3b, 4b) |
| Feature Scaling | Next-Day-Temperature (1e) |
| Fine tune network | Pets-Classification (1) |
| Gaussian Mixture Model | PDF-Estimation (3) |
| Gradient Boosting | Next-Day-Temperature (2b) |
| K- nearest neighbors (KNN) | MNIST (1a,1d,1e,1f, 3a), Next-Day-Temperature (1a,1d), PDF-Estimation (2) |
| Keras | MNIST (0) |
| Linear Logistic Regression | MNIST (1c,1d,1e), Penguin (2), Flower-Classification (1c) |
| Linear Regression | Next-Day-Temperature (1c, 1d, 1e) |
| Locality-Sensitive Hashing (LSH) | MNIST (3b, 4b) |
| MDS and t-SNE | MNIST (4c) |
| MLP (Multilayer Perceptron) | MNIST (2a, 2b) |
| Naïve Bayes | MNIST (1b,1d,1e), Next-Day-Temperature (1b,1d) |
| Principle Common Analysis (PCA) | MNIST (1f, 2b, 4a, 4b), PDF-Estimation (4) |
| Random Forest | Next-Day-Temperature (2c) |
| ResNet | Pets-Classification (1,2) |
| Seaborn | Penguin (1) |
| Sentencepiece Tokenizer | Tokenizer (2) |
| sklearn | MNIST (1d,1e,1f), Next-Day-Temperature (2a, 2b, 2c) , Penguin (1,2), Flower-Classification (1c,2), PDF-Estimation (3,4) |
| Torch | MNIST (2a, 2b), Flower-Classification (1a,1b), Pets-Classification (1,2) |
| Wordpiece Tokenizer | Tokenizer (1) |
| Zero-Shot Prediction | Flower-Classification (1a,1b) |