## **TEKLRN**

## **KERAS LEVEL 19**

- 1. Training & evaluation with the built-in methods
  - setup
  - Introduction
- 2. API Overview a first end-to-end example
  - use the MNIST dataset as NumPy arrays, in order to demonstrate how to use optimizers, losses, and metrics.
  - What and end-to-end workflow looks like
  - Demonstration with the training configuration (optimizer, loss, metrics):
  - Usage of fit() method for Training the model
  - Fit Model on Training Data
  - Usage of evaluate()
  - The compile() method: specifying a loss, metrics, and an optimizer
- 3. Custom losses
- 4. Custom metrics
- 5. Handling losses and metrics that don't fit the standard signature
- 6. Automatically setting apart a validation holdout set
- 7. Training & evaluation from tf.data Datasets
- 8. Using a validation dataset
- 9. Input formats supported
- 10. Using a keras.utils.Sequence object as input
- 11. Using sample weighting and class weighting
- 12. Passing data to multi-input and multioutput models
- 13. Writing your own callback.
- 14. Checkpointing models.
- 15. Using learning rate schedules
- 16. Visualizing loss and metrics during training