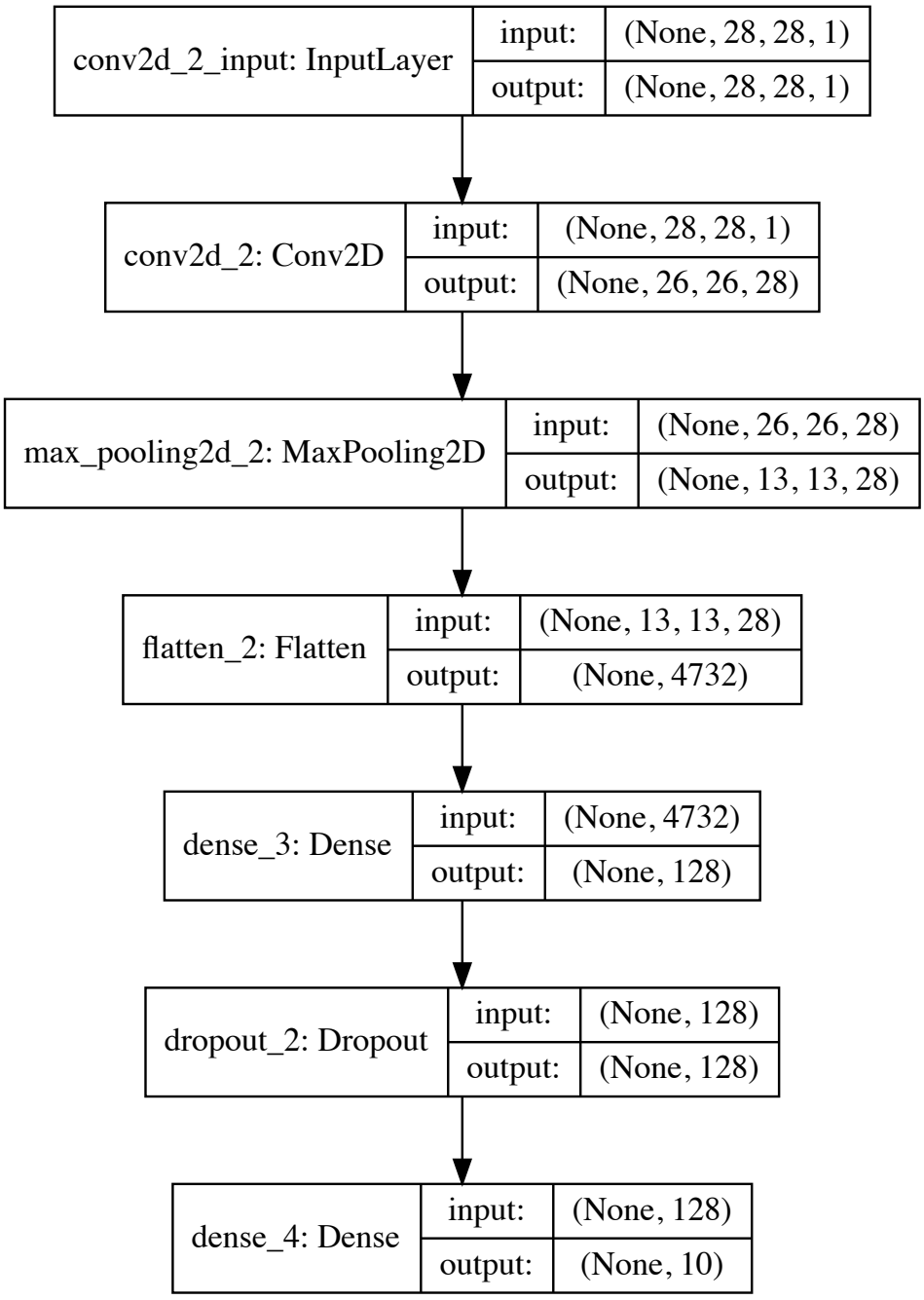
CLASSIFICATION REPORT

Architecture of the Neural Network



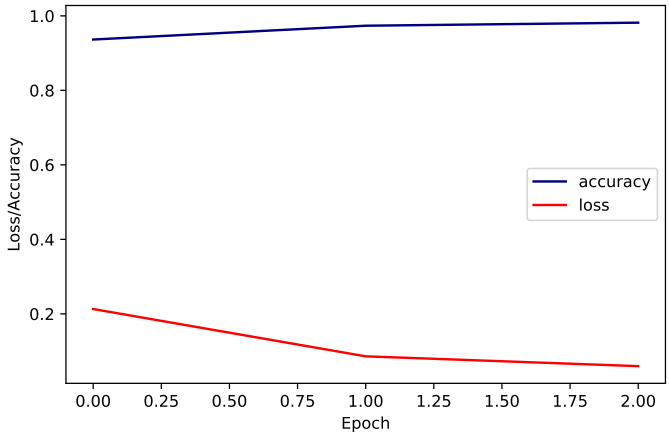
TP/FP/TN/FN Test Set Examples

TP - true positives, TN - true negatives, FP - false positives, FN - False negaties

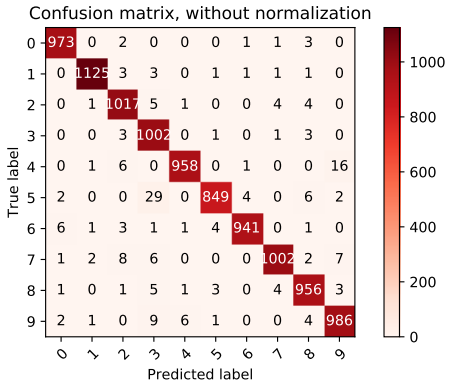
(a) Examples of TP

(b) Examples of TN

Training and Validation Loss and Accuracy



Test Set Confusion Matrix



Classification Scoring for Test Set

TP - true positives, TN - true negatives, FP - false positives, FN - False negaties

The performance of a classifier can be described by:
Accuracy - (TP+TN)/(TP+TN+FP+FN)
Precision (Purity, Positive Predictive Value) - TP/(TP+FP)
Recall (Completeness, True Positive Rate - TP/(TP+FN)
F1 Score = 2 (Precision * Recall)/(Precision + Recall).
Brier Score - mean squared error (MSE) between predicted probabilities (between 0 and 1) and the expected values (0 or 1). Brier score summarizes the magnitude of the forecasting error and takes a value between 0 and 1 (with better models having score close to 0).

Metric	**Score**
Accuracy	0.98
Precision	0.98
Recall	0.98
F1 Score	0.98
Brier Score	0.03