

Pattern Recognition and Neural Networks

Writer Identification System

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Abstract—

I. INTRODUCTION

II. APPROACH

III. PREPROCESSING MODULE

IV. FEATURE EXTRACTION MODULE

V. CLASSIFICATION MODULE

VI. PERFORMANCE ANALYSIS

Classifier	100 test samples	1000 test samples
Support Vector Machine	100%	99.7%
K-Nearest Neighbors	99%	99.4%
Random Forest	99%	99.6%
Logistic Regression	100%	99.5%
Naive Bayes	100%	98.9%

TABLE I: Comparison between accuracies of different classifiers using LBP feature and different sample size.

VII. OTHER APPROACHES

VIII. WORKLOAD DISTRIBUTION

IX. CONCLUSION AND FUTURE WORK

REFERENCES

- [1] Writer identification using texture features: A comparative study.
- [2] Text independent writer recognition using redundant writing patterns with contour-based orientation and curvature features.
- [3] An improved online writer identification framework using codebook descriptors.