ABSTRAK

Dengan perkembangan teknologi saat ini, mengakibatkan machine learning menjadi salah satu metode yang sangat diminati, salah satu algoritma machine learning yang populer adalah k-nearest neighbors (KNN). Machine learning telah banyak digunakan dalam bidang medis untuk menganalisa dataset medis, pada penelitian ini akan digunakan algoritma machine learning k-nearest neighbors (KNN) dikarenakan tingkat akurasinya dalam pengenalannya yang baik dan termasuk kelompok algoritma supervised learning. Hasil penelitian menunjukan metode k-nearest neighbors (KNN) dalam mengenali citra x-ray penyakit tuberkulosis (TB) menggunakan ektraksi fitur SURF dengan rata-rata akurasi yaitu 73%.

Kata Kunci : Tuberkulosis, KNN, SURF.

ABSTRACT

With current technological developments, machine learning has become one of the most popular methods, one of the popular machine learning algorithms is k-nearest neighbors (KNN). Machine learning has been widely used in the medical field to analyze medical datasets, in this study the k-nearest neighbors (KNN) machine learning algorithm will be used because of its good level of accuracy in recognition and is included in the supervised learning algorithm group. The results showed the k-nearest neighbors (KNN) method in recognizing x-ray images of tuberculosis (TB) using SURF feature extraction with an average accuracy of 73%.

Keywords: Tuberculosis, KNN, SURF.