

## ABSTRAK

# IMPLEMENTASI ALGORITMA BOYER MOORE DAN ALGORITMA LEVENSHTTEIN DISTANCE PADA PENCARIAN ARSIP KECAMATAN (STUDI KASUS KECAMATAN WANARAJA)

Oleh

**Muhamad Bustomi**

**1127050104**

Kecamatan Wanaraja merupakan instansi pemerintahan yang melayani masyarakat seperti: Administrasi surat menyurat berupa surat masuk dan keluar, surat keterangan KTP, kartu keluarga dan lain lain, atas dasar itulah penyediaan informasi tentang aplikasi pencarian arsip Kecamatan sangat penting. Penelitian dalam studi kasus ini bertempat pada Kecamatan Wanaraja Kabupaten Garut. Metode penelitian ini menggunakan metode kualitatif, serta metode pengembangan perangkat lunak yang digunakan yaitu *prototype* dengan beberapa tahapan, diantaranya: Analisis kebutuhan, desain sistem, pengujian sistem, dan implementasi. sehingga menghasilkan sebuah aplikasi pencarian arsip dengan tujuan menerapkan algoritma *Boyer-moore* dan algoritma *levenshtein distance* serta kinerja Algoritma *Boyer-moore* dan Algoritma *Levensthein distance* pada aplikasi pencarian arsip kecamatan Wanaraja. Jenis arsip meliputi dokumentasi berupa surat, gambar, laporan tahunan. File berformat PDF dan JPG. Hasil kinerja dari algoritma *Boyer-moore* dan algoritma *Levensthein distance* ini dengan 20 inputan pada setiap pencarian, kemudian di dapatkan rekomendasi dan rata-rata waktu dari setiap pencarian, maka dapat di simpulkan bahwa algoritma boyer moore dan algoritma Levensthein distance bekerja dengan optimal dalam pencarian arsip di Kecamatan Wanaraja.

**Kata Kunci** : *Boyer-Moore*, *Levensthein Distance*, Kecamatan, Pencarian, arsip

## ABSTRACT

# THE IMPLEMENTATION OF BOYER MOORE ALGORITHM AND LEVENSHTEIN DISTANCE ALGORITHM ON SEARCHING SUBDISTRICT ARCHIVES (CASE STUDY IN WANARAJA SUBDISTRICT)

Oleh

**Muhamad Bustomi**

**1127050104**

Wanaraja Subdistrict is a government agency that serves the community such as: Administration of correspondence in the form of incoming and outgoing mail, KTP certificate, family card and others, on the basis of that the provision of information about the District archive search application is very important. The research in this case study took place in the District of Wanaraja, Garut Regency. This research method used qualitative method, and software development method that was used. It was prototypes with several stages, including: Requirement analysis, system design, system testing, and implementation. resulting in an archive search application with the aim of applying the Boyer-moore algorithm and the levenshtein distance algorithm and the performance of the Boyer-moore Algorithm and the Levensthein distance algorithm in the Wanaraja sub-district search application. The type of archive included documentation in the form of letters, pictures, annual reports. Files in PDF and JPG format. The performance results of the Boyer-Moore algorithm and the Levensthein distance algorithm with 20 inputs for each search, then get recommendations and the average time of each search, it can be concluded that the Boyer Moore algorithm and the Levensthein distance algorithm work optimally in archive search. in Wanaraja District.

**Keywords:** *Boyer-Moore, Levensthein Distance, District, Search, Archive*