

ABSTRAK

Pengembangan Sistem Rekomendasi Pekerjaan berdasarkan Indeks Prestasi Mahasiswa (IPM) menggunakan Metode *Content-Based Filtering*
(Development of Job Recommendation System based on Student Achievement Index using Content-Based Filtering Method).

Ibu Intan Sulistyaningrum Sakkinah, S.Pd., M.Eng (Dosen Pembimbing)

Rosyida Arian Rahma
Informatics Engineering Study Program PSDKU Nganjuk
Information Technology Department
Program Studi Teknik Informatika PSDKU Nganjuk
Jurusan Teknologi Informasi

ABSTRACT

Students frequently encounter challenges in identifying a career that corresponds with their academic qualifications and personal passions. This study seeks to create a job recommendation system utilizing the Content-Based Filtering approach, which is based on students' Grade Point Average (GPA), major, skills, and interests. The system evaluates the student profile against job specifications by employing the Cosine Similarity algorithm to assess the level of relevance. It is developed as a web-based application utilizing the Flask framework and the Python programming language. The assessment procedure is carried out using 5-fold cross-validation, yielding an average Top-3 Accuracy of $85.0\% \pm 5.6\%$ and an Exact Accuracy of $54.7\% \pm 8.4\%$, demonstrating that the system can deliver pertinent and reliable job recommendations. This system is anticipated to aid students in making career choices that are in harmony with their academic accomplishments and personal inclinations.

Key Words: Content-Based Filtering, Cosine Similarity, GPA.