

## ABSTRAK

Penelitian ini bertujuan untuk mengembangkan aplikasi seleksi program perguruan tinggi pendamping dan sekolah menengah kejuruan pusat keunggulan dengan menggunakan skema pemadanan dukungan dari Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. Metode decision analysis dengan algoritma Decision Tree C4.5 digunakan dalam memilih program yang tepat. Pengujian dilakukan untuk mengukur kinerja aplikasi dalam hal akurasi dan nilai AUC. Penelitian ini juga memberikan rekomendasi untuk pengembangan aplikasi dan peningkatan kinerja metode decision analysis dan algoritma Decision Tree C4.5 di masa depan. Diharapkan aplikasi ini dapat mempermudah pengolahan data dan informasi serta membantu Direktorat SMK dalam memilih perguruan tinggi pendamping yang sesuai dengan kebutuhan SMK di Indonesia.

Kata Kunci : Program perguruan tinggi pendamping, Sekolah menengah kejuruan pusat keunggulan , Skema pemadanan dukungan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, *Decision analysis*, Algoritma *Decision Tree C4.5*, Akurasi, Nilai AUC , Pengolahan data dan informasi.



## ABSTRACT

*This research aims to develop an application for selecting accompanying programs of center of excellence tertiary institutions and vocational high schools using the matching support scheme provided by the Ministry of Education, Culture, Research, and Technology. The decision analysis method with the Decision Tree C4.5 algorithm is employed to determine the appropriate programs. Testing is conducted to measure the application's performance in terms of accuracy and AUC value. The study also provides recommendations for application development and enhancing the performance of the decision analysis method and the Decision Tree C4.5 algorithm in the future. It is expected that this application will facilitate data and information processing and assist the Directorate of Vocational High Schools in selecting suitable accompanying tertiary institutions that meet the needs of vocational high schools in Indonesia.*

*Keywords: Accompanying program of tertiary institutions, Center of excellence vocational high schools, Matching support scheme, Ministry of Education, Culture, Research, and Technology, Decision analysis, Decision Tree C4.5 algorithm, Accuracy, AUC value, Data and information processing.*

