**Penerapan *K-means Clustering* Untuk Pengelompokan Tingkat Kepuasan Pengguna Lulusan D4 Teknik Informatika Politeknik Negeri Jember**.
*(Application of K-means Clustering to Group User Satisfaction Levels Among Graduates of D4 Informatics Engineering at Polytechnic Negeri Jember.)*
Pembimbing (1 orang)

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*ABSTRACT*

*Politeknik Negeri Jember (Polije), especially the D4 Informatics Engineering (TIF) Study Programme, continues to adapt to the development of the digital era and industry needs. To assess the suitability between the competence of graduates and the demands of the world of work, a tracer study was conducted through the Polije CDC official website. This tracer study includes measuring the level of satisfaction of graduate users based on seven main criteria, namely teamwork skills, decision making, acting intelligence, integrity, communication, mastery of information technology, and foreign languages. Although the data was obtained in the form of a Likert scale, there was no comprehensive analysis to identify the overall pattern of graduate user satisfaction. Therefore, this study applied the K-means Clustering method to group satisfaction data based on the seven criteria. From the 187 alumni data analysed, four(4) groups (clusters) were obtained by testing the elbow method and silhouette score, where cluster 1 (labelled 0) became the most dominant with a total of 103 graduate users (55%). This finding shows that most users are very satisfied with TIF graduates, which reflects the good quality of graduates and is relevant to industry needs. This research is expected to be a reference in the evaluation and development of the study programme curriculum in a sustainable manner.*

**Keyword:** *graduate user satisfaction, clustering k-means, , elbow method, Silhouette score.*