

## **ABSTRACT**

Talent Management is a stage process of a company to find, sort, improve, and retain the best talent of employees for the needs of the company or agency. A company recommends or requires Talent Management to go through an open recruitment process by taking a final *test* and selection, namely an interview or a recommendation. However, the weakness of the current system is still dominant using a recommendation system that contains elements of the subjectivity of related parties which is not by the results determined from the capacity *test*, employee performance, and psychological *tests*. From these weaknesses, in this study, a *machine learning* approach with the Gradient Tree Boosting (GTB) method was developed to recommend the position of structural officials. In this study, we use a talent management *dataset* from a university in Indonesia. The experimental result shows the promising performance of our proposed method.

Keywords: HR Management, Gradient Tree Boosting, *Machine Learning*, Recommendation