

## **ABSTRACT**

Tea (Camellia sinensis) is a drink containing caffeine, an infusion made by brewing the leaves, leaf buds, or dried petioles of the Camellia sinensis plant with hot water. Tea derived from the tea plant is divided into 4 groups, namely black tea, green tea, white tea, and oolong tea. This study uses an exploratory approach with the method of acquiring electronic nose datasets, exploring machine learning algorithms, developing classification models, developing applications using the Endpoint API, developing application user interfaces (UI), and application testing. This study aims to develop an electronic nose system and an artificial intelligence method for classifying tea quality based on aroma. This research was supported by the Gambung Tea and Quinine Research Center.

Keywords: Tea, Machine Learning, Electronic Nose, Endpoint API, User Interface (UI)