

## **ABSTRACT**

### **Noisy Motor Vehicle Identification Application With Vehicle Number Recognition Based On Yolo**

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Rapid advancements in technology have had a positive impact on many aspects of life. However, technology also brings negative consequences. With the increasing number of motor vehicles, a problem arises: the noise from these vehicles disturbs the environment. This issue forms the basis of this thesis: "How to develop an application for identifying noisy motor vehicles with a license plate recognition feature based on YOLO?". To Building the intended application requires a microphone for sound sensing, a camera for image capturing, and YOLO for license plate identification. License plate numbers from noisy vehicles will be logged into a database for reporting to authorities. Completion of this thesis aims for the application to function according to its design. Specifically, YOLO is expected to accurately identify license plates. This initiative is anticipated to mitigate urban noise pollution and enhance overall quality of life for communities.