

# Awake Drive

## Driver Alertness Monitoring and Maintenance System

### About us

One of the causes of traffic accidents is due to drivers losing alertness while driving. According to statistics, over 6,000 traffic accidents each year are related to drivers falling asleep. Recognizing this issue, a group of students from the University of Science and Technology, Vin University, and Foreign Trade University has created Awake Drive —a Driver Alertness Monitoring and Maintenance System using brainwave technology.

- **Objective:** To reduce traffic accidents by helping drivers maintain alertness on the road.
- **Mission:** To provide an innovative solution that actively monitors and supports driver focus and safety using advanced brainwave technology.



### Awake Drive

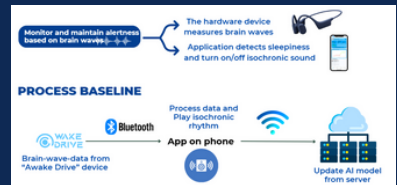
Awake Drive was developed with the hope of helping drivers maintain their alertness while on the road. The Awake Drive system consists of two main parts:

**Hardware:** A device that measures the user's brainwaves and transmits data via Bluetooth.

**Software:** A mobile application that analyzes the measured data and emits Isochronic tones, helping users stay alert while driving.

The system integrates two main features as follows:

- **Brainwave Monitoring and Alertness Assessment:** The system monitors the user's brainwave activity to assess alertness and focus levels. By analyzing brain data, the product can detect early signs of drowsiness and provide timely alerts while the driver is still in an alert state. This feature achieves high accuracy by gathering direct information from the brain, identifying physiological indicators related to drowsiness.
- **Alertness Restoration:** Based on brainwave entrainment principles, the system uses Isochronic/Binaural beats to stimulate the brain. This feature adjusts the frequency of brainwaves to match the user's current state, restoring alertness and enhancing focus. Through specially designed brainwave solutions, the system helps drivers maintain energy and concentration throughout their journey, reducing the risk of drowsiness-related accidents.



### Customer

- **Individual Customer Profile:** Solo drivers who prioritize safety and appreciate technology. They seek high-quality, effective products at reasonable prices, valuing quality first, then price, aesthetics, and brand reputation. Their preferred shopping platforms include Shopee, Lazada, Instagram, and Facebook.
- **Business Customer Profile:** Corporate purchasing representatives focused on employee productivity and driver safety. They are interested in technology integration but cautious about costs and implementation. They typically research products through forums, conferences, and expert advice, believing that quality products enhance collective value and customer satisfaction.

