

2025年臺灣國際科學展覽會 優勝作品專輯

作品編號	100051
參展科別	工程學
作品名稱	Safe CrossWalk (SCW)
得獎獎項	成就證書

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Safety,Pedestrian,Crossing

Safe CrossWalk (SCW) is an innovative solution designed to enhance pedestrian safety at crosswalks, addressing the alarming issue of 270,000 pedestrian fatalities worldwide each year. By integrating advanced sensors, artificial intelligence, and real-time communication, SCW creates safer and more efficient urban environments. The system comprises three key components: SCW Strisce, a smart crosswalk device that detects pedestrian movement; SCW Car, a vehicle-integrated system that alerts drivers; and SCW AI, which processes data to optimize traffic flow and safety measures.

SCW offers a proactive approach to reducing accidents through detection, alerts, and data-driven optimization. The solution not only improves safety but also supports urban planning by providing valuable insights into pedestrian and vehicle behavior. SCW aligns with the growing demand for AI-driven technologies in Smart Cities, presenting a scalable and cost-effective model for implementation. By fostering collaboration with municipalities and insurance companies, Safe CrossWalk aims to transform urban mobility, saving lives and creating smarter, safer cities.

【評語】 100051

1. Please identify the problems to be solved clearly.
2. Please identify the solutions proposed for the problems clearly. Please describe the function and specification of the investigated SCW
3. Please show the results of experiment clearly. Please assess the implementation and efficiency of the system.