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(57) Abstract :
An automatic tire repairing device for four-wheeler comprises of a platform 1 configured with an artificial intelligence enabled image capturing module 2 for detecting type of tire, a mechanical arm 3 equipped with a motorized jack 4 for lifting two-wheeler, a telescopically operated gripper 5 for removing stone stuck in treads of tire along entire area of the tire, a primary robotic arm 6 for removing nail from the tire in case decoded type of tire is a tube-less tire, a chamber 8 for storing a tire-plug to insert at the area where the nail is detected, an electronic nozzle 7 for dispensing an adhesive solution on tire-plug, a cutter for cutting extra length of tire-plug inserted within tire, a secondary robotic arm 9 attached with a spraying unit 10 for highlight the area where the nail is inserted in order to notify a user regarding the detected nail.

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