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(57) Abstract :
The present disclosure discloses a helmet safety system (100) that offers a comprehensive solution for rider safety and connectivity. Integrated into the helmet (102), a push-button (104) for rider detection, an alcohol level measuring sensor (106), and a belt lock detection switch (108). These components transmit signals wirelessly to a circuit (112), and a control unit (114) processes received data to generate wireless activation or deactivation signals. A receiver unit (116) on the motorbike interprets these signals, controlling bike activation or deactivation. An image acquisition unit (118) captures surroundings, and an AI engine (120) in the control unit analyzes images to determine optimal speed limits. A microphone (126) enables rider communication and voice commands. The system also includes a raincoat (132) for added protection. Moreover, this helmet integrates advanced safety features, communication capabilities, and environmental analysis for an enhanced riding experience.

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