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(57) Abstract :

The present invention discloses an improved AI-integrated webcam device (100) comprising a dual-lens module (104), embedded AI processor (108), and motion-responsive actuators (120). It enables real-time automatic subject framing and background blur without external software. Using onboard neural networks, the device detects subjects, estimates depth, adjusts framing, and applies segmented blur with minimal latency. Designed for cross-platform plug-and-play use, the invention ensures high video clarity, reduced system load, and enhanced user experience in varied lighting and environmental conditions.

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