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(57) Abstract :
A haptic feedback device (10) for real-time code debugging visualization is disclosed. The device includes a wearable actuator (14), a controller (12), and a code interpreter (18) that receives debugging event data from IDEs. The actuator delivers tactile feedback based on mapped error events such as breakpoints, exceptions, and logic faults. Customizable patterns are stored in a database (22), with AI-based prediction (28) for anticipatory alerts. The invention enhances debugging efficiency and accessibility for diverse developers.

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