

Tiny Touches, Big Impacts: Designing Micro-Touch Gestures for Power Tool Interaction

Thema:

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Hintergrund

Despite the pervasiveness of touch-based interaction in modern life, there is a significant gap in our understanding of how to incorporate this technology into power tools. This is a critical issue since power tools are essential to various industries, including manufacturing, construction, and automotive. Currently, power tools rely on physical buttons, knobs, and switches, which can be challenging to use in specific contexts and lead to physical strain and injury. To address this issue, it is essential to explore how touch-based interaction can be integrated into power tools to improve their usability and efficiency.

One promising approach to address this issue is through the use of micro-touch gestures, which involve light and subtle touches. These gestures have the potential to reduce physical demands while increasing precision and accuracy in power tool use. However, there is a lack of research on the design and effectiveness of micro-touch gestures for power tool interaction. Therefore, the goal of this research is to design and evaluate effective micro-touch gestures for power tool interaction using an elicitation study.

Zielsetzung der Arbeit

Goal of this work is to gain valuable insights into how micro-touch gestures can be effectively incorporated into the design of touch-sensitive interfaces for power tools, and improve the usability and efficiency of these essential tools.

Konkrete Aufgaben

Erwartete Vorkenntnisse

Keine

Weiterführende Quellen

Nach Absprache mit dem Betreuer.

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