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Workload Evaluation of Gaze-Writing Systems

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In this paper, we present the workload evaluation of three types of eye-based text entry methods: (1) eye typing, (2) eye gesturing, and (3) continuous writing. As metrics for workload evaluation, we used the NASA task load index (NASA-TLX), which was developed by NASA for assessing the workload of users working with human-machine systems. Experimental results have shown that with eye typing, the user can enter text fast with a low workload, and that eye gesturing and continuous writing need time to bring users to a certain level, and a higher workload is needed than eye typing for maintaining a high text entry speed.

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