A Generalized Process Model of Human Action Selection and Error and its Application to Error Prediction

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Abstract: Our model of action selection and postcompletion error in two form filling tasks extends to skip errors in a story telling task. We also discuss how it explains perseverations in one of the aforementioned form filling tasks. Finally we discuss a predictive classifier application we built from the model's data. The classifier could allow an autonomous agent to know when it is a bad time to interrupt a human, when a human is about to err, and how to help.