

# A Dialogue Experimentation Toolkit

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**Abstract:** Dialogue is inherently interactive, fragmented and context dependent. This makes controlled experiments difficult. Current techniques involve relatively coarse interventions such as manipulations of task difficulty or use of confederates. We present a text-chat based experimental platform ‘DiET (distributed free from [http://imc.dcs.qmul.ac.uk/diet/index.php/Main\\_Page](http://imc.dcs.qmul.ac.uk/diet/index.php/Main_Page)) that provides new ways to introduce fine-grained experimental manipulations into dialogue.

Text-based dialogue, e.g. chat rooms and instant messaging, is now a ubiquitous mode of communication. In addition NLP techniques can now produce semantic and syntactic analyses at speeds that make real-time interventions feasible. Participants communicate using a text chat tool and each turn is routed via a server. The server is configured to detect target words or phrases. This information is used to trigger specific experimental interventions. For example, ‘spoof’ clarification requests that appear to originate from another participant. This can be done without disruption to the dialogue and without detection by the participants.