

On the (im)possibility of a text-only CAPTCHA

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A CAPTCHA is an automated sentry to allow humans but not (ro)bots to enter the Garden of Eden. Such a sentry is called "text-only" if all its challenges and responses are formulated in plain text.

Text-only CAPTCHAs are very desirable -- for both practical and theoretical reasons. Although there have been a few promising approaches toward constructing such a CAPTCHA, success is not assured.

I will present a formal model developed by Manuel Blum in collaboration with Luis von Ahn to capture properties of certain text-only CAPTCHAs. The model gives some insights why it is hard, if not impossible, to create a text-only CAPTCHA.