

**Telling Humans and Computers Apart (Automatically)
or "How Lazy Cryptographers do AI"**

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A CAPTCHA is a program that can tell whether its user is a human or a computer. More specifically, a CAPTCHA is a program that can generate and grade tests that humans can pass but current computer programs cannot. We view the creation of such a program as a purely cryptographic problem: we assume that all data and code used by a CAPTCHA are publicly available and we give good evidence that even in this case it is difficult to write a program that passes the tests. CAPTCHAs have several applications and some results of this project are currently in use by Yahoo.

This talk will give an overview of the CAPTCHA project, which is part of a new attempt by Manuel Blum and his students at CMU to gear cryptography towards human-related problems. I will describe several open problems and the challenges that face HIPs.

About me: I am a graduate student in computer science at CMU. My advisor is Manuel Blum.