

USING HUMAN COGNITIVE ABILITIES TO DISTINGUISH COMPUTERS AND HUMANS FOR PREVENTING BOT ATTACKS

M. KAMESWARA RAO¹ & K. KIRAN KUMAR²

¹Associate Professor, Department of Electronics & Computer Engineering, K L University, Vaddeswaram,
Guntur, Andhra Pradesh, India

²Professor, Department of Electronics & Computer Engineering, K L University, Vaddeswaram, Guntur,
Andhra Pradesh, India

ABSTRACT

Denial of service (DoS) attacks by malicious automated programs (e.g., bots) is becoming a serious problem as masses of Web service accounts are being illicitly obtained. CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart) is a test that can tell humans and computer programs apart automatically. The aim is to allow the server to identify the visitor is a human or a computer, and only provide services to human. The goal of CAPTCHA's is to ask questions which human users can easily answer, while current computers programs cannot. In this paper, a new CAPTCHA based on using the human ability to understand comics is proposed. In this Comic CAPTCHA, a seven-panel combination of relevant and irrelevant comics is presented and users that are able to identify the relevant comic panels are identified as human.

KEYWORDS: Bot, CAPTCHA, Denial of Service, Seven -Panel Comic, Turing Test