# Universidad de Alcalá



# CATCHAPS/HIPS TO TEST AND IMPROVE THE SECURITY



Code

TIC\_UAH\_15

#### **Application areas**

Information and Communication
Technologies

#### Type of collaboration

- Interested in companies or institutions to conform a consortium for a project proposal to make it the system real
- Manufacturating Agreement
- Services Agreement

#### **Main researches**

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#### CONTACT



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### ABSTRACT

Extensive knowledge and experience in IT Security, in particular, in the field of the security of CAPTCHA/HIP. It has also performed several successful security analyses of very different CAPTCHAs/HIPs currently in production.

They can assist in:

- Developing a threat model covering their proposal. This would allow our customers to better understand the security ecosystem in which their proposal is working and better conduct Risk Management strategies.
- Assessing the security of their current CAPTCHA proposal or implementation. This would allow the customers to understand if their CAPTCHA/HIP proposal or implementation passes a minimum security level without which it should not be put into production.
- Study of improvements. This service is orientated towards allowing the customers to improve their CAPTCHA/HIP security without affecting much the user interaction. This study might or not reach an improvement, depending on the proposal. After the results of this study, a new security assessment should be run.
- Improvement of Resilience. This service would allow us to cooperate with our customers towards implementing additional measures to increase their CAPT-CHA/HIP security under attack. This would possibly include attack detection and mitigation mechanisms.

## **ADVANTAGES AND INNOVATIONS**

Having a secured CAPTCHA implementation can help a company to protect its on-line assets from various types of automated abuse. This can prevent the loss of revenue to the company, and also allow it to confidently offer more on-line services knowing that their automated abuse is difficult.

Innovative aspects:

- Automatic attacks to test the security of the implementation.
- Increase the security against external attacks

