Photo-Based Authentication Using Social Networks

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Hug Me
By RockYou!

Hug Me opens up a whole new world of action-based communication, for example 'Hug Her, Slap Him, Tickle Them!'

3,794,241 monthly active users — 43 friends — 119 reviews
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Problem: Access control

Forrester Research
forrester
Location: Cambridge, MA
Web: http://www.forrester.com
Bio: Forrester Research, Inc. (Nasdaq: FORR) is an independent technology and market research company that provides pragmatic and forward-thinking advice. Recently: Nominations now open for Forrester Groundswell Awards! Enter at: http://www.forrester.com/Gra... 8 days ago

datzhott
datzhott
Location: Los Angeles
Web: http://datzhott.com
Bio: Where everything cool is hot
Recently: I'm at work getting ready to go postal. Why don't somebody call 9-1-1? Pop! I shot my boss in the ass. LOL! 2 days ago

autopoietic
autopoietic
Recently: so i joined twitter. now what? 5 days ago

Block forrester (you will not receive any more follow requests from forrester)
Block datzhott (you will not receive any more follow requests from datzhott)
Block autopoietic (you will not receive any more follow requests from autopoietic)
Our Approach: *Lineup*

- User sets access control
- Client requests authentication
- System selects one or more photos
- System generates a “solution”
- System presents test to user
- User identifies subjects in photo
- User is authenticated
Key Idea #1: Captchas

This ensures that a person, not an automated program, is submitting this request.
Key Idea #3: Peer to Peer Authentication
Key Idea #3: Crowdsourcing
- User embeds widget
- User sets privacy level
- Client requests access to site
- Lineup generates photo ‘test’
- Client solves ‘test’
- Access granted
Lineup

User embeds widget

User sets privacy level

Client requests access to site

Lineup generates photo ‘test’

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Access granted
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Client solves ‘test’

Access granted

// User identification
$user id = $facebook->require login();

// Get user photos
$photosOfMe = $facebook->api client->photos get($user id);
$getTags = $facebook->api client->photos getTags($photo['pid']);

// Extract photo details
foreach ($getTags as $tag) {
    $imgSrc = $tag['pid'];
    $subject = $tag['subject'];
    $description = $tag['text'];
    $XCoordinate = $tag['xcoord'];
    $YCoordinate .= $tag['ycoord'];
}
User embeds widget

User sets privacy level

Client requests access to site

Lineup generates photo ‘test’

Client solves ‘test’

Access granted
Key Idea #4: Trust

A thing has just happened that you might find interesting.

OK
Challenges: Security
Future Directions