

PDFs and Academic Studies:

- [unCaptcha: A Low-Resource Defeat of reCaptcha's Audio Challenge](#)
- [Rojas-Lozano v Google](#)
- [Exploring User Interaction with Modern CAPTCHAs](#)
- [Practicality analysis of utilizing text-based CAPTCHA vs. graphic-based CAPTCHA authentication](#)
- [Hacking Google reCAPTCHA v3 using Reinforcement Learning](#)
- [I'm not a human: Breaking the Google reCAPTCHA](#)
- [Dazed & Confused: A Large-Scale Real-World User Study of reCAPTCHA v2](#)
- [The Sharing Economy and the Edges of Contract Law: Comparing U.S. and U.K. Approaches](#)

Articles and Websites:

- [Google's new CAPTCHA security login raises 'legitimate privacy concerns': Business Insider](#)
- [reCAPTCHA.sucks](#)
- [You \(probably\) don't need ReCAPTCHA](#)
- [Google reCAPTCHA Service Isn't Secure – It Might Be Exploiting Users: Tech Report](#)
- [US government requests for personal data to Google](#)
- ['FYI. A Warrant Isn't Needed': Secret Service Says You Agreed To Be Tracked With Location Data: 404 Media](#)
- [Google's reCAPTCHA favors – you guessed it – Google: The Register](#)
- [reCAPTCHA Privacy — Is it an Oxymoron Now?](#)
- [Initial attempts at reverse engineering noCAPTCHA reCAPTCHAs](#)
- [US v Google Antitrust Hub](#)

Specific claims:

- In 2012, hackers were able to get bots through with a 99.1% success rate. [\[here\]](#)
- in 2017 it V2 was cracked, 85% success rate. [\[here\]](#)
- The code to do so was made public. and still works today. [\[here\]](#)
- According to researchers at UC Irvine, there's no practical difference between v2 and v3. [\[here\]](#)
- A few months after launch, V3 was beaten with a 97% success rate. [\[here\]](#)
- Google doesn't really tell us how reCAPTCHA works, besides "using an advanced risk analysis engine" [\[here\]](#) and [\[here\]](#)
- New reCAPTCHAs run in the background [\[here\]](#)
- New reCAPTCHAs are invisible [\[here\]](#)
- New reCAPTCHAs only show challenges to bots and suspicious users [\[here\]](#)
- reCAPTCHA fulfilled a deal between Google and NYT [\[here\]](#)
- "This is a way for Google to indirectly link activity outside of Google's properties – collected under the guise of security – to Google's knowledge of that individual" [\[here\]](#)
- "The implication is that Google offers a better web experience to Google Account holders, in a way that discourages choices that protect privacy." [\[here\]](#)
- Does it make bot's job harder? No at all. The legacy flow is still available and old OCR bots can keep recognizing. [\[here\]](#)