

# Ghost Student Fraud: The Bot-Driven Problem

Cloudflare Bot Management helps stop bots from creating fake student accounts

## Fraudsters use malicious bots to defraud financial aid programs

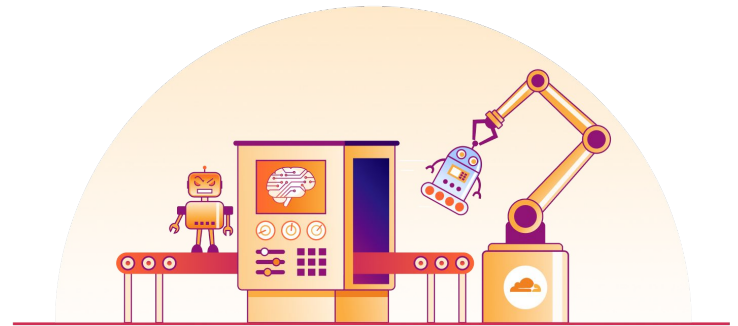
### Ghost students are stolen or synthetic identities used to enroll in academic programs

Today's bots make it easy for fraudsters to create fake accounts. They automate the process of filling out registration forms, using various techniques to mimic human behavior and evade detection.

The goal is financial fraud, so ghost students must appear legitimate just long enough to collect financial aid before being discovered. Generative AI helps them maintain the ruse by creating and submitting fake coursework.

This ghost student problem is a scalable, industrialized operation that weaponizes bots at several key stages:

- Automated enrollment and credential stuffing
- Mimicking legitimate activity
- Financial aid extraction



## Bot management is a key part of your fraud defense ecosystem

Cloudflare Bot Management helps colleges and universities implement an enterprise-grade defense that specifically targets the automation at the heart of the attack, shifting to better prevention while reducing manual review and post-incident investigation.

Beyond bot management, Cloudflare's identity partnerships help further mitigate identity fraud with secure, frictionless authentication across provider types. You can integrate our Zero Trust Network Access solution with your existing identity provider to implement strong, multi-factor authentication.

## What makes Cloudflare Bot Management unique



### Stop bad bots

Cloudflare Bot Management mitigates bad bot activity without impacting legitimate users or good bots



### Avoid CAPTCHAs

Cloudflare has developed innovative ways to challenge bots without frustrating real people with CAPTCHAs



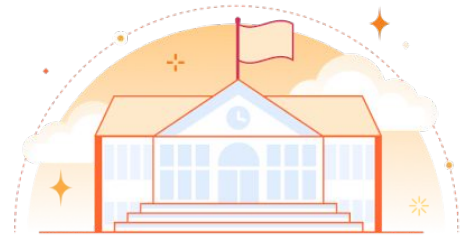
### Multiple detection methods

Cloudflare uses machine learning, behavioral analysis, and fingerprinting to accurately classify bots

## Cloudflare Bot Management: The Multi-Layered Defense

Cloudflare Bot Management is uniquely positioned to solve the Ghost Student problem because it operates at the network edge, leveraging massive global traffic intelligence and advanced machine learning to distinguish between human users and sophisticated automated threats.

It blocks the attack before the traffic ever reaches the university's resource-intensive application, protecting both the enrollment portal and the critical LMS infrastructure.



### Behavioral Analysis and Machine Learning at Scale

Cloudflare processes an enormous volume of internet traffic; nearly 20% of all global web requests. This vast dataset allows Cloudflare's machine learning models to be continuously trained on the latest, most sophisticated bot tactics, including those that mimic human behavior.



### Protecting Against Credential Stuffing and Account Takeover

Cloudflare leverages global threat intelligence, including known compromised credential lists, to immediately block login attempts from sources previously associated with malicious activity across the Cloudflare network.



### Advanced Fingerprinting

Cloudflare uses advanced fingerprinting techniques (JA3/JA4) to identify the unique "signature" of the client's TLS handshake. Automated tools and bots, even those rotating IPs, often use a consistent, non-standard signature that can be blocked or challenged without impacting real students using standard browsers.

"The great thing about Cloudflare Bot Management solutions is I don't need to spend time fine-tuning. The machine learning algorithms just work because Cloudflare has such great data. Our lives are 1000 times easier while still ensuring our sites are both safe and fast for our customers."

**Manager, Security Engineering**  
SoFi

### Learn more about Cloudflare for Education

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Cloudflare makes websites, learning platforms, and networks faster and more secure – helping schools embrace change, increase efficiency, and accelerate the future of education in the age of AI.

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