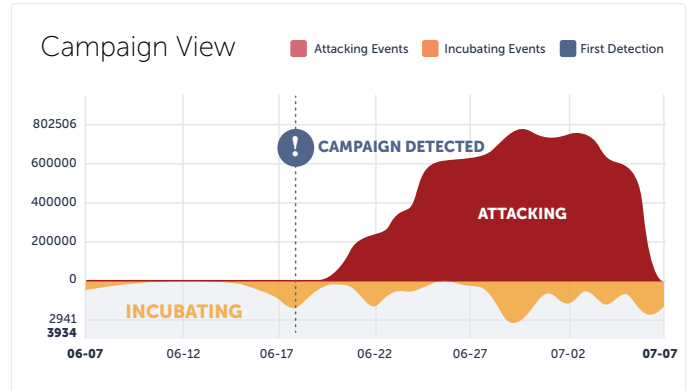


## The Modern Online Fraud Challenge

The rapid expansion of consumer-facing online services has led to an explosion of user accounts, ushering in the "billion user era." Well-organized cyberattack campaigns are using this growth to their advantage, creating armies of fake and compromised accounts to hide in the shadows and conduct fraud against web sites and mobile apps. It is challenging for trust and safety teams to stay ahead of these fraudsters since rules and models need constant updating and are always reacting after the damage has been done.



## Catch it Before it Happens

The DataVisor User Analytics Service is a next-generation online fraud detection solution that uses unsupervised analytics to find malicious accounts lurking within consumer-facing web sites and mobile apps and prevent the downstream attacks they conduct, such as:

- ▶ Fake account registration
- ▶ Account takeover
- ▶ Fraudulent transactions
- ▶ Spam, fake posts, reviews and likes
- ▶ Promotion abuse
- ▶ Fake clicks, impressions and installs

## Benefits of Unsupervised Detection

At the heart of DataVisor’s technology is the patent-pending DataVisor User Analytics Engine. Utilizing an unsupervised detection algorithm operating within a Spark “in-memory” Big Data platform, DataVisor can analyze billions of events per hour and automatically discover unknown malicious campaigns early, without using labels or training data, ensuring you have caught the entire crime ring hiding inside your service before any damage is conducted.

<p><b>EARLY WARNING</b> Catches “sleeper cells” before the incur any damage</p> <p><b>90%</b> detected early or in real time</p>	<p><b>UNPARALLELED RECALL &amp; PRECISION</b> Detects all members of a crime ring</p> <p><b>8x</b> reduction in manual review time</p>	<p><b>UNSUPERVISED</b> Discovers unknown attacks without requiring labels or training data</p> <p><b>500k+</b> bad accounts detected per day</p>	<p><b>MASSIVELY SCALABLE</b> Analyzes billions of events per hour</p> <p><b>300M+</b> users protected daily</p>
--	--	--	---



*“DataVisor’s user analytics are an important part of our spam detection system, and helps prevent malicious accounts from interacting with real users and businesses.”*

-Jim Blomo | Engineering Manager | Yelp

## Unsupervised Approach Detects Advanced Fraudsters

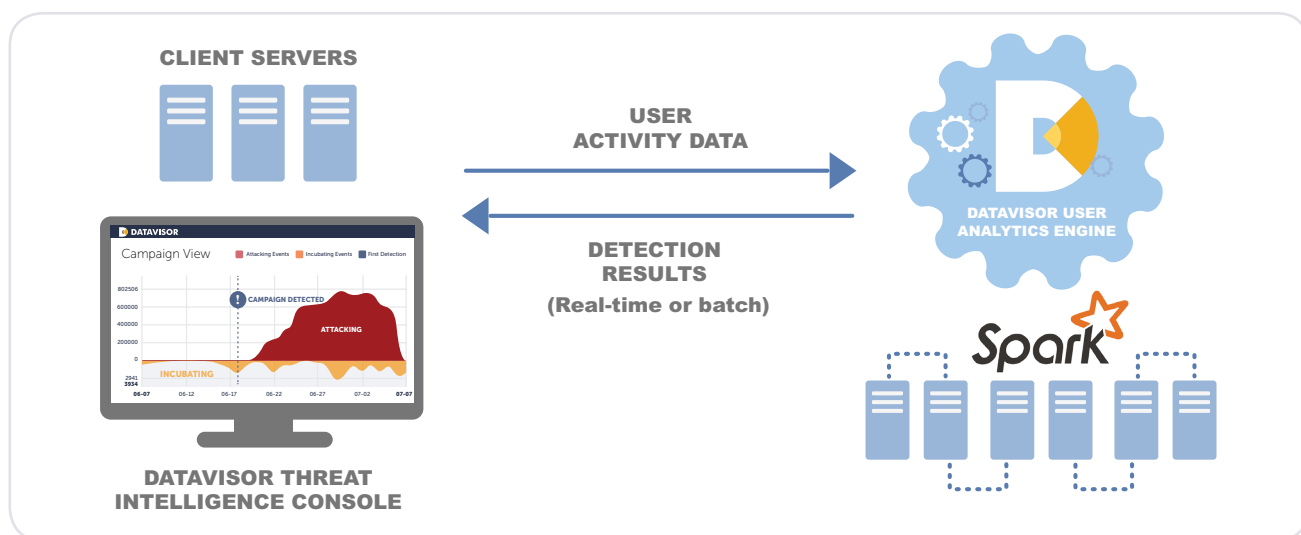
DataVisor is adept at catching advanced attackers even when they employ sophisticated evasion methods, such as:

- ▶ **“Sleeper Cell” Accounts:** Fraudsters incubate fake accounts to evade rules on account age
- ▶ **Anonymous Proxies:** Allows attackers to hide both their true IP and location to defeat IP blacklists
- ▶ **Mobile Device Flashing:** Evade device fingerprinting by overwriting the firmware on the mobile device
- ▶ **Cloud Services:** Use services such as AWS to scale up attack campaign while evading blacklists
- ▶ **Mechanical Turks:** Human labor conducting manual attacks to defeat 2FA and CAPTCHA security
- ▶ **Anonymous Email/SMS Services:** Create disposable email & SMS accounts to appear as a real user
- ▶ **GPS Fakers:** Software that allows attackers to fake their geolocation at scale
- ▶ **Content Scraping:** Steal photos and content from third party sites to appear authentic
- ▶ **Model Poisoning:** Attacks that pollute rules/models-based security with false signals
- ▶ **Friending:** Improve legitimacy by sending mass friend requests to other users

## How DataVisor Works

Integration with the DataVisor User Analytics Service has been designed with ease-of-use in mind. Simply send us your raw service event logs and we do the rest of the work. No labels or training data required so your fraud team can be more efficient.

DataVisor’s Big Data security analytics engine will analyze your event logs and return fraud results to you via an API either in real-time or as a batch process periodically. No labels or training data is required. We also provide every customer with their own DataVisor User Analytics Console which includes a threat dashboard to visualize the health of your online service, detailed fraud reports and customized query interface to aid in forensic investigations on malicious users and campaigns.



## Contact DataVisor

If you are interested in learning how DataVisor can help bring your fraud detection to the next level or wish to start a trial to assess your current fraud exposure level, please contact us at: [info@datavisor.com](mailto:info@datavisor.com) or visit us at [www.datavisor.com](http://www.datavisor.com)

**DataVisor Inc.**

883 N. Shoreline Blvd. Suite A200 | Mountain View, CA 94043