



NETSPARK

**The leading AI filtration technology**

# Background

- The leader in moderation technologies
- Established more than a decade ago
- The category leader
- Mobile app and ISP solution provider – more than 2M daily active users
- Official filtering solution for the Ministry Of Education in Israel for all schools
- Cross platform filtering solutions - Android, iOS, Windows





## Known Filtration Problems

Low AI accuracy  
High resource consumption & costs  
No solution for LIVE content  
No ability to run on the edge



Inappropriate  
Pages/Websites/Apps



Tech Addiction



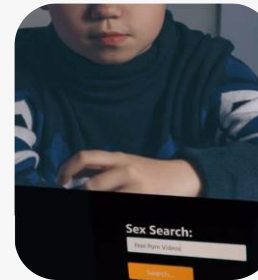
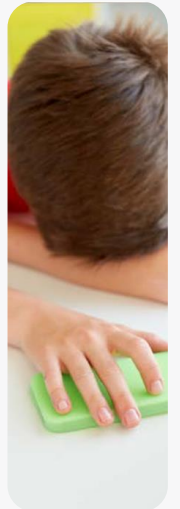
Sexting



Unlimited Screen Time



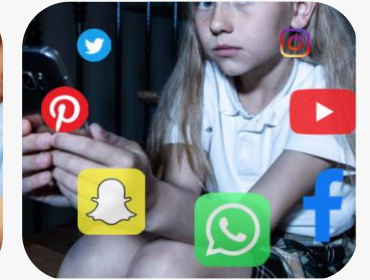
Pornography



Pedophiles



Cyberbullying



Social Media






NETSPARK

## Mission:

Make the internet a safe place



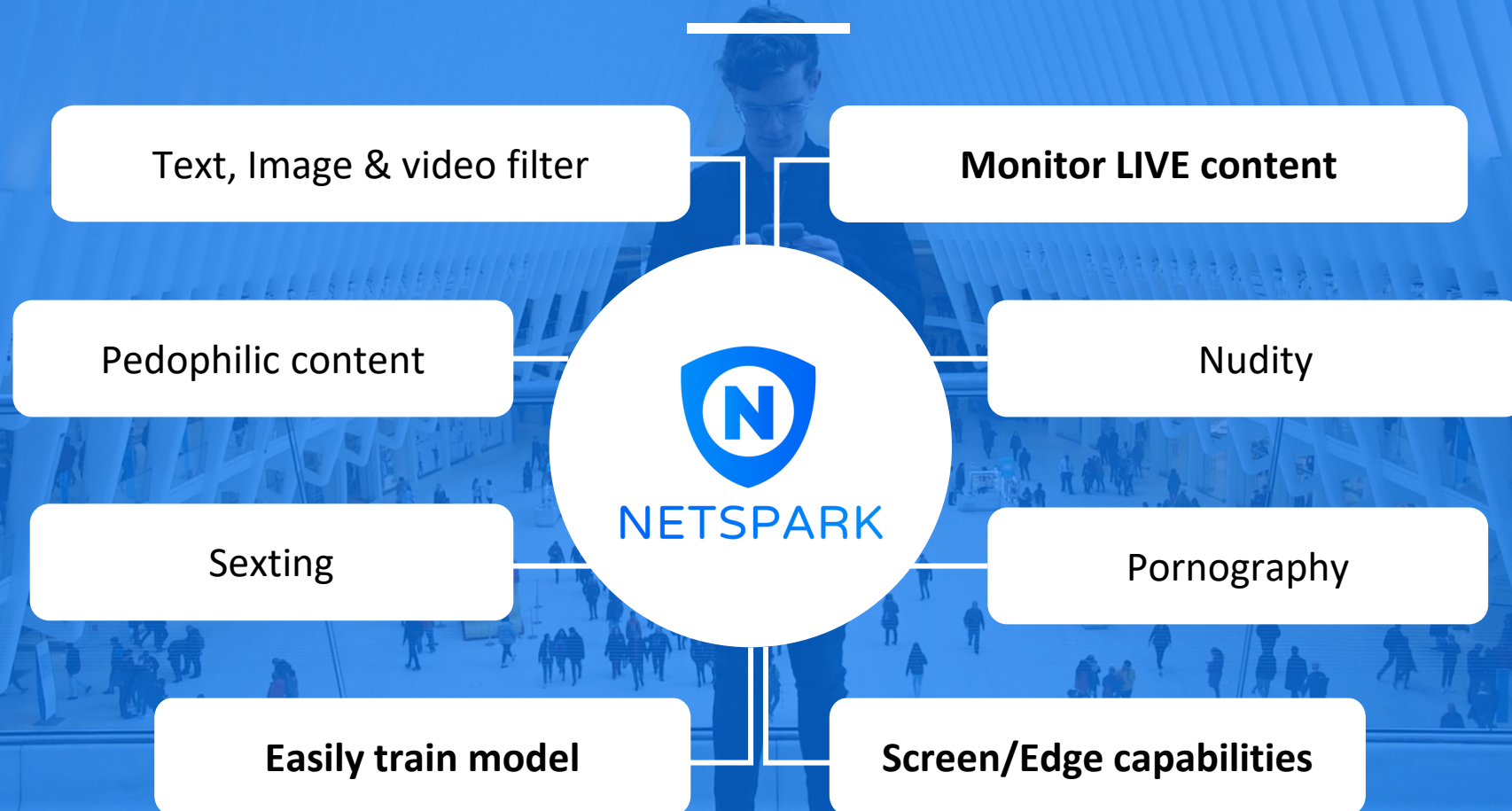
## We have the technology, knowledge and experience

- Patent protected filtering platform
- Very accurate
- Real time/offline
- Screen filtering capabilities – **monitor LIVE content**
- **Extremely efficient** - low resources required to process videos and large amounts of data
- Edge capabilities
- Flexible deployment possibilities



# The One Stop Shop Real Time Solution

Current abilities



# Use cases

## ISP solutions –

- Netspark is the exclusive provider for Internet Rimon – the 4 largest ISP in Israel:
  - Data analysis and filtering
  - White labeled application

## Scope:

- More than 2M daily active users
- Billions of requests every day
- 400 M images per day
- 40 M videos per day
- 80 K queries per second per DB
- 100 Gb/s







# Use cases

## Moderation services –

- Nasdaq UGC company is one of our clients using moderation services:
  - Pedophilic content
  - Nudity and pornographic content

## Scope:

- More than 1M videos per month
- Appx. 60M images per month





# Use cases

## Law Enforcement Agencies–

- Partnered with two law enforcement agencies.
- Identify pedophilic content on suspect's devices.
- Prevent/mitigate psychological harm caused to investigators.

# Netspark's Mobile Application

- Netspark is the only software available to consumers that recognizes and filters inappropriate content in real time.
- The only filtration solution that is able to filter encrypted applications
- More than 2M daily active users
- Sold in Israel, USA and Europe.
- **Schooling solution**





# Unique value proposition

Netspark's moderation solutions:

- Very fast
- Very Accurate
- Screen/edge capabilities – Moderate LIVE/streaming content
- require a few resources –
  - Reduce resource consumption
  - Reduce moderation costs
- Pedophilic content
- Easily train model to add capabilities





NETSPARK

Thank you

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We analyze videos very fast and use a few resources

In many cases we provide a result for an hour long video within less than a second.

- We divide videos into frames and remove irrelevant ones.
- Thus, we only analyze a portion of the frames.
- Minimal resources required.
- Protected under patent number 9805280 and 62/758,589

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## Real Time Local Filtering on Screen - Edge

- Access all content on user's screen in real time – LIVE, streaming, offline.
- Autonomous –
  - does not require an internet connection
  - Filter even when user is offline
- Uses device resources –
  - Save servers & computing resources
  - Save storage costs
- Patent protected

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Screen and edge capability currently available on Android, In the coming months will be available on Windows and Chromebooks will be supported on Android 11







## Accuracy that saves costs

- Our algorithms are X6 more accurate than AWS's and Google's.
- With such accuracy, you can send less content for human moderation.
- Platform may be optimized in accordance with your requirements.
- Our system requires minimal resources so saving on computing and storage is also available.

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## Filter Pedophilic & explicit content

- Analyze harmful content (even LIVE) and flag, block, report, delete, or perform other operation on it
- Help eradicate such horrible user behavior

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## Easily add abilities

As additional needs become clear, we can train our models to identify additional content as per requirement

All it takes is a sufficient database

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# Technology Competition Analysis – Accuracy

The table below shows the percentage of videos that are classified as pornography by the compared algorithms:

Category	Explanation	Netspark	Azure	AWS	Google
Non-porn - Easy	False-positive - lower percentage is better (0%)	0.50%	6.47%	0.50%	1.00%
Non-porn- Difficult	False-positive - lower percentage is better (0%)	10.00%	34.00%	31.00%	16.50%
Porn	True-positive - higher is better (100%)	96.50%	94.26%	96.50%	94.75%

# Technology Competition analysis – False Positive

The table below illustrates the false positive rate, i.e. the percentage of non-porn videos that according to the algorithms contained pornographic frames:

Category	Explanation	Netspark	Azure	AWS	Google
Non-porn - Easy	False-positive - less is better (0%)	0.00%	6.47%	3.98%	10.45%
Non-porn- Difficult	False-positive - less is better (0%)	3.50%	34.00%	22.00%	37.50%