



## Spreaker is how you podcast.

Whether you're producing your passion project or growing a podcast business it has never been easier. Spreaker is the one-stop shop for podcast hosting, creation, distribution and monetization.

**Start Podcasting** 

Spreaker\*



#### The Podcast Business Ecosystem

CONTENT PRODUCER PLATFORM

CMS DISTRIBUTION AD TECH CONTENT LISTENING APP

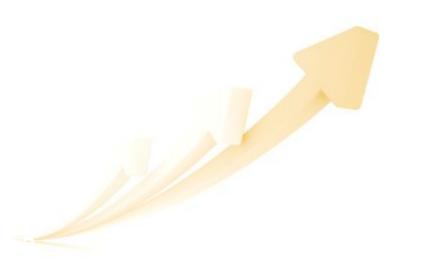
SALES REP



# What sets us apart?

- Effortless Publishing
- Enterprise Level Reliability
- Dynamic ad insertion and management
- Extensive Analytics and Reporting
- Distribution far and Wide

## Spreaker in numbers



## >100 k

Podcast producers

## >300 M

Downloads per month

4

Continents



↑ The Slang Podcast 
 ▼

**Podcasts** 

N

**Statistics** 



Ad Exchange



Campaigns



Promotion

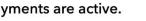




Admin



Developers



Your payment account has been verified.

Projected monthly payment (\$10.00 minimum).

Next payment of \$14.55 (earned until October 31, 2021) will be paid on or before December 31, 2021.

Paid on November 30, 2021 to your paypal account: theslangpodcast@gmail.com.

#### Ad Exchange Activation



Don't waste any monetization opportunity! When you activate the Ad Exchange, you receive additional revenues from the ads coming from our open marketplace, even if you don't have any running campaign.

#### **Ad Exchange Statistics**



## Incentive to game the system!

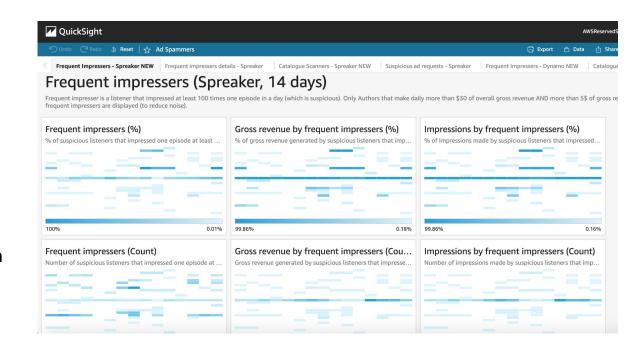
- If you are able to generate fake downloads on your content and not get caught you can earn an interesting amount of money:)
- This is bad for us, for the honest content producers and for the industry as a whole.

#### How do we deal with that at

#### Spreaker?

Currently we have a combination of:

- Data collection and aggregation
- Definition of suspicious thresholds based on experience
- Data visualization
- Human analysis and action



## Is it enough?

 The current approach is kind of OK at the current scale but it becomes more and more unsustainable the more producers we onboard.



We want to improve our system exploring ML techniques

## Project goal

- Explore algorithms /
   procedures to automatically
   discover fake downloads to
   identify cheaters
  - Training and evaluating ML architectures on a datasets provided by us

## Dataset definition

Field	Description	
content_user_id	The id of the podcaster hosting on our platform.	
content_podcast_id	The id of the podcast owned by the podcaster hosting on our platform.	
content_episode_id	The id of the episode that is part of the podcast.	
listener_user_agent	User agent string of the episode download.	
listener_geolocation	Geolocation down to City from where the download was generated from	
listener_device	Device family (desktop, mobile etc)	
listener_os	Operating system (windows, iOs, Android)	
listener_anonymized_ip	Anonymized hash of the ip performing the download.	
timestamp	Timestamp of the download	

### Labelled data

user_id	is_scammer	
1	true	
2	false	
3	false	
4	true	

 We will provide a set of labelled data coming from supervisioned human activity

## **Expected result**

user_id	is_scammer	p(is_scammer)
1	true	0.9
2	false	0.02
3	false	0.2
4	true	0.85
5		0.7
6		0.2
7		0.99
8		0.12

 We want to test several algorithms to correlate feature vectors coming from the initial dataset and the labelled data and apply it to a larger dataset to classify users.

## ML Architecture s we want to explore

- Logistic Regression
- Naive Bayes
- K-Nearest Neighbors
- Decision Tree
- Support Vector Machines

Neural Networks (BONUS)

## Project technology

These are the main pieces of technology the candidate will be exposed to:

- Python
- Scikit-Learn
- PyThorch
- Jupyter Notebooks
- AWS Cloud Services

### **Team**

- This is not a one man job, during the process you will be able to discuss with the Spreaker data team, ideas approaches and get some technical help when needed.
- We are a remote team since more than 10 years. The communication will be mainly on our internal chat (Slack) but we have engineers living nearby if 1:1 sessions are required.
- The candidate needs basic skills in written and spoken English

## Thanks.

#### **Emanuele Rampichini**

**Engineering Manager** 

#### **Get In Touch**

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