

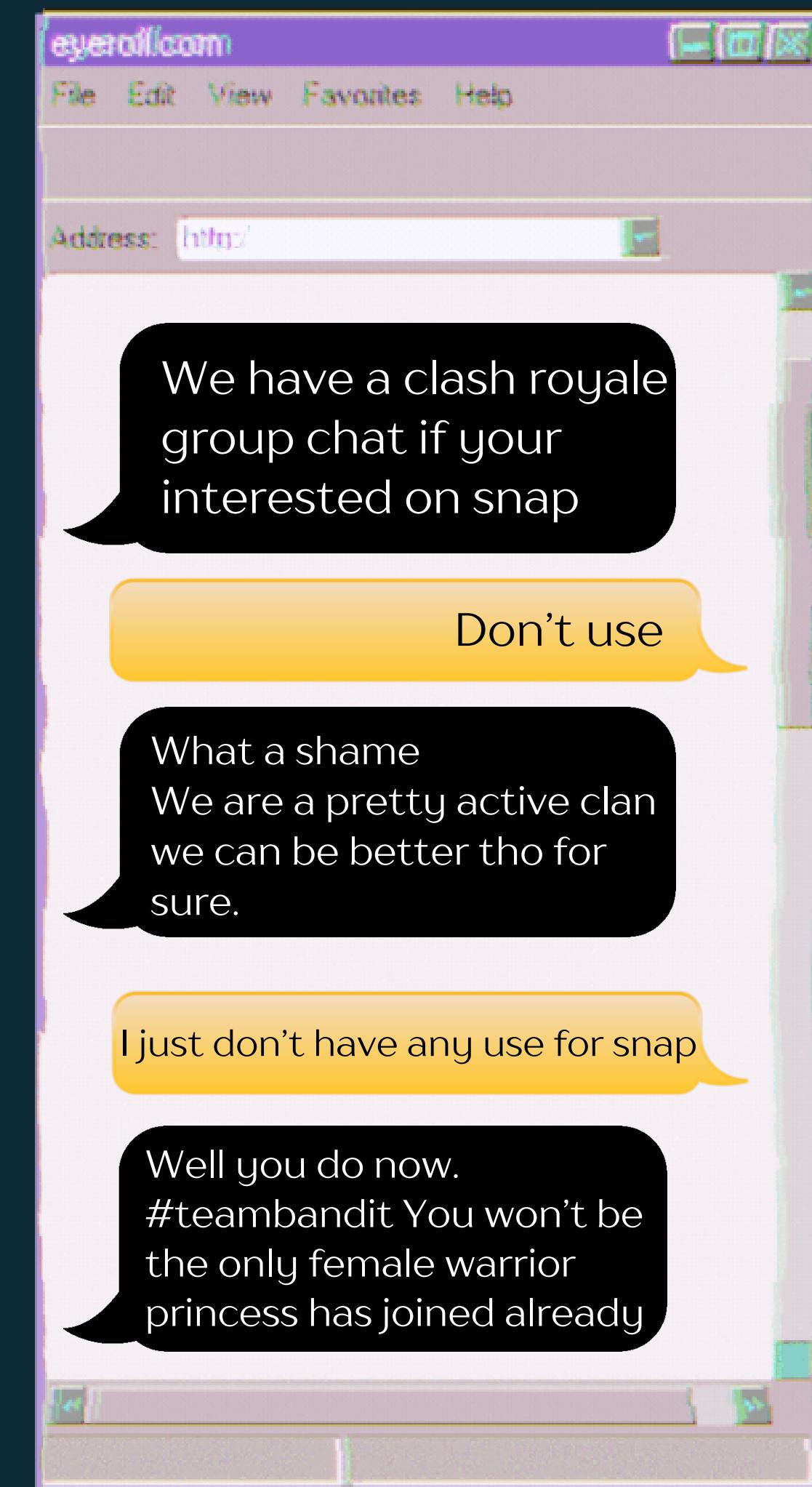
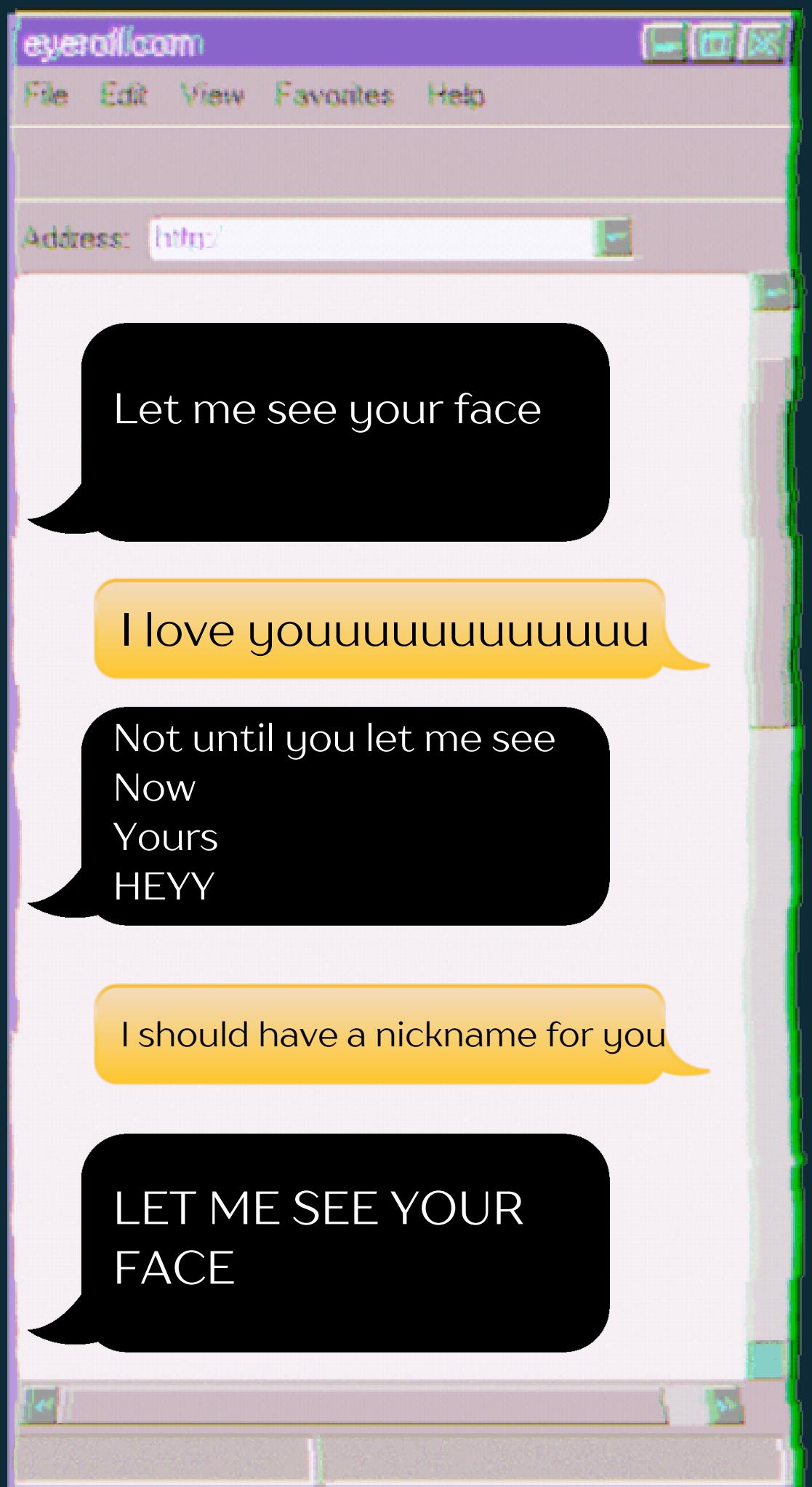
SUP
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ABUSIVE BEHAVIOUR PATTERN RECOGNITION



Tim Bary, Marko Jovanovic, Alexandra Onciul, Andru Onciul

START HACK
2023



GROOMER'S PSYCHOLOGY

Getting inside their head to be able to catch them



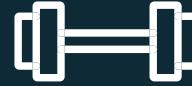
Groomers are comforting.



Groomers are manipulative.



Groomers are sensible.



Groomers are patient.



Groomers are unpredictable.

Deconstructing the Online Grooming of Youth: Toward Improved Information Systems for Detection of Online Sexual Predators

Completed Research Paper

Connie S. Barber, PhD

Silvia Cristina Bettez, PhD

OUR SOLUTION



Trigger system, simple filtering

Dictionary matching with different categories:

- Accounts/social media
- Compliments
- Relationships



Grooming scoring system

A risk score is generated from handcrafted features based on the behavioral patterns



High score → Human moderation

A moderation request or an email filing system that notifies the parents of suspicious conversations

BUILDING LONG-TERM FEATURES USING LONG-TERM DATA

- Victim isolation index
- Lots of questions asked by one user
- Comparison between claimed and real localization
- Abrupt end of conversation once a social network account is given
- Slow evolution of the player, despite a high amount of hours on the game
- Overkindness detectable by sentiment analysis

IT TAKES YEARS TO PRESERVE
INNOCENCE,
IT TAKES SECONDS TO LOSE IT.

Do you have any questions for us ?



DEMO

DEMO

TEST IT YOURSELF

Grooming detection in Clash Royale chats

Data Loaded! (using st.cache_data)

Move the slide to see the outputs of our model for the messages sent at a certain hour



On Messages sent from from 6:00 to 7:00 showing the 5 best

Triggered messages with SUPERCELL risk values from -1 to 7 (CHILD_GROOMING top, RELATIONSHIP_SEXUAL_CONTENT bottom)

where dumeny @?

-1.0

-1.0

It fucking sucks but I really need to get through my issues so I can actually be a good girlfriend

-1.0

3.0

If you got to know other girls and build a relationship

-1.0

3.0

idk i don't get why you can be like that towards me but you have a whole boyfriend and your not really mine :/

-1.0

3.0

But can't you see I literally can't be in a good relationship with you bc I have problems I have to work through

-1.0

3.0

Most suspicious conversations: our groomer risk score value (0-32)

25.813786929274844

10.375

8.5

7.998293515358362

6.583333333333334

Heyyy i miss you so much when can You deserve it

My trophies YALL ARE BRITHERS?!
5/5

it gets like that
i just play with my friends

i miss u already :(
Aww :(

Playing on ipad
well played

< Manage app

