# **Chatroom Safety**



# **Detecting pedophiles in chatrooms**

#### **Motivation**

In online chatrooms a person can take any identity he/she wants. There is no check on the correctness of age and gender in the profile of a user.

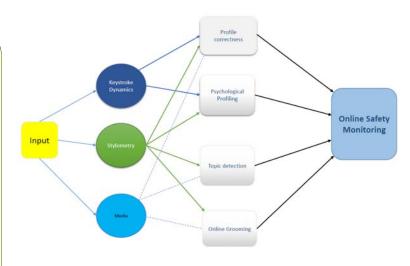
Child predators might change gender and age information with the goal of getting in contact with young children for malicious purposes.



In this project we want to create a safer online environment by developing tools for automatic detection of pedophiles in chatrooms.

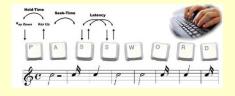
#### Research Questions

- Can the characteristics of a user be determined based on his or her behaviour in a chatroom
  - -Age / gender correctness with profile
- Can we detect the topic of a conversation in a chatroom
  - -Sexual nature of the conversation
- Can we detect cyber-grooming in a chat conversation
  - Detecting harmful sequence in the conversation
- How can we combine the results of the above RQ to find pedophiles in a chatroom
  - -Online Safety Monitoring



### **Keystroke Dynamics**

- Determining gender and age based on how a person types on a keyboard
  - Duration
  - Latency



## Stylometry

- Stylometry is based on the assumption that each individual has a unique writing style
- Author profiling of age, gender, and emotional state





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