# Defending Against Visual Cyberbullying Attacks in Emerging Mobile Social Networks

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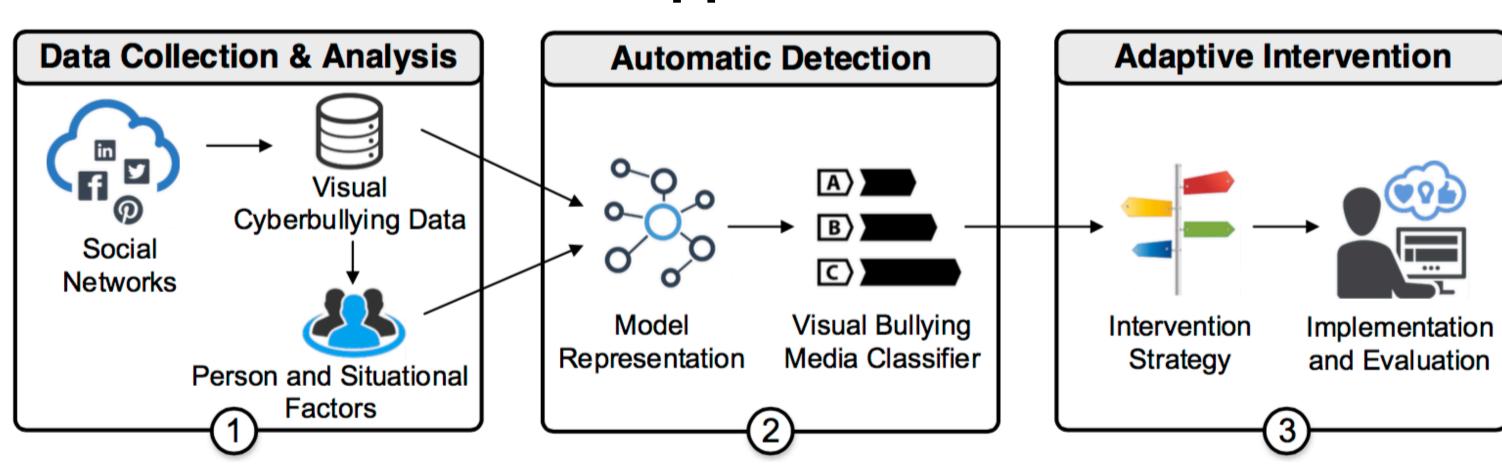
### **Motivation**

- Cyberbullying has become widely recognized as a serious social problem
- All state-of-the-art studies in automatic cyberbullying detection have mainly focused on textual cyberbullying, while largely overlooking the misuse of visual media in cyberbullying

## Challenge

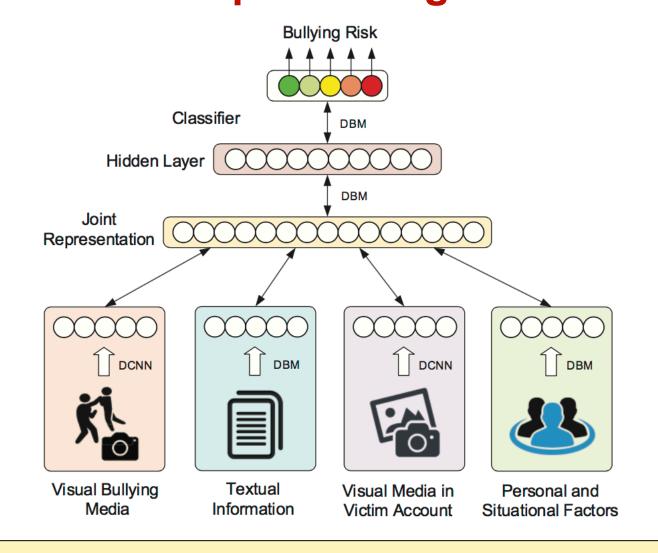
- New person and situational factors related to visual cyberbullying
- Automatic and accurate detection of visual cyberbullying
- Dynamic monitoring and response

# **Approach**

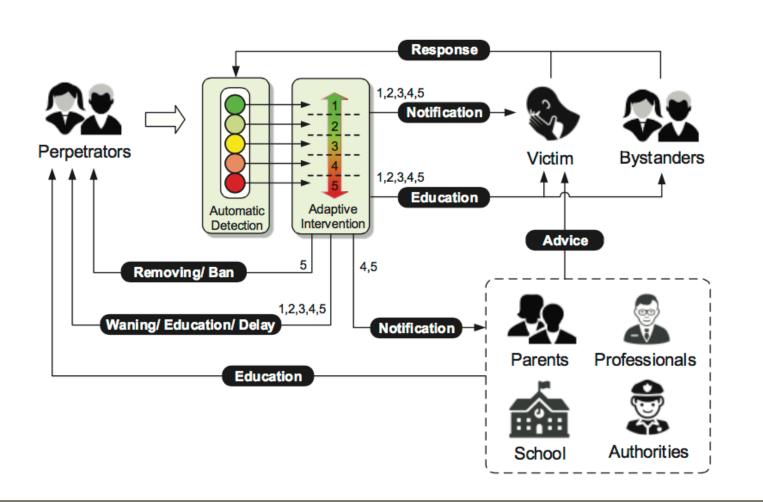


- Identifying person and situational factors associated with visual cyberbullying
- Designing a cross-feature classifier for automatic visual cyberbullying detection
- Developing an adaptive cyberbullying intervention system

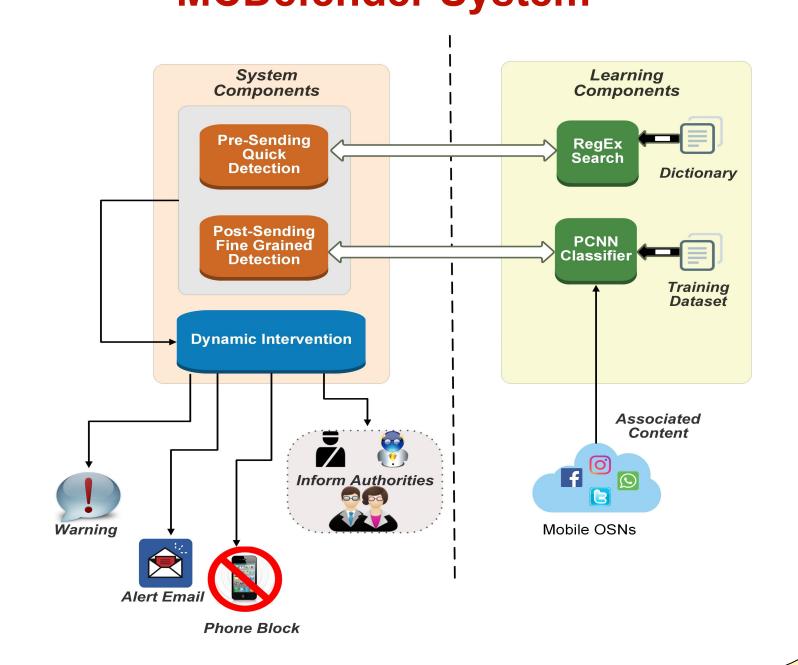
#### **Multimodal Deep Learning Architecture**



#### **Adaptive Intervention Mechanism**



### **MCDefender System**



#### **Broader Impact**

- The system could be used to curb cyberbullying among young people and reducing the myriad harmful effects
- The proposed methods can be potentially adopted and implemented in popular mobile social network platforms
- The results generated by this project could be expanded to cope with other threats targeting adolescents

Interested in meeting the PIs? Attach post-it note below!



