TWC: Small: Collaborative:

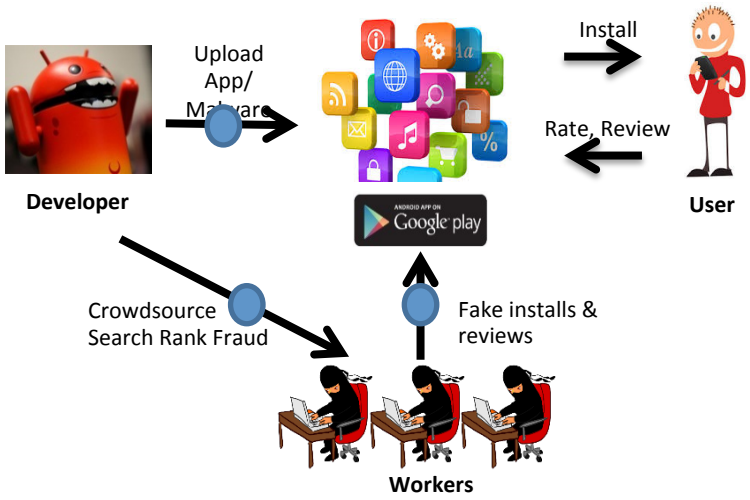
Cracking Down Online Deception Ecosystems

FIU Florida International University

Georgia Tech

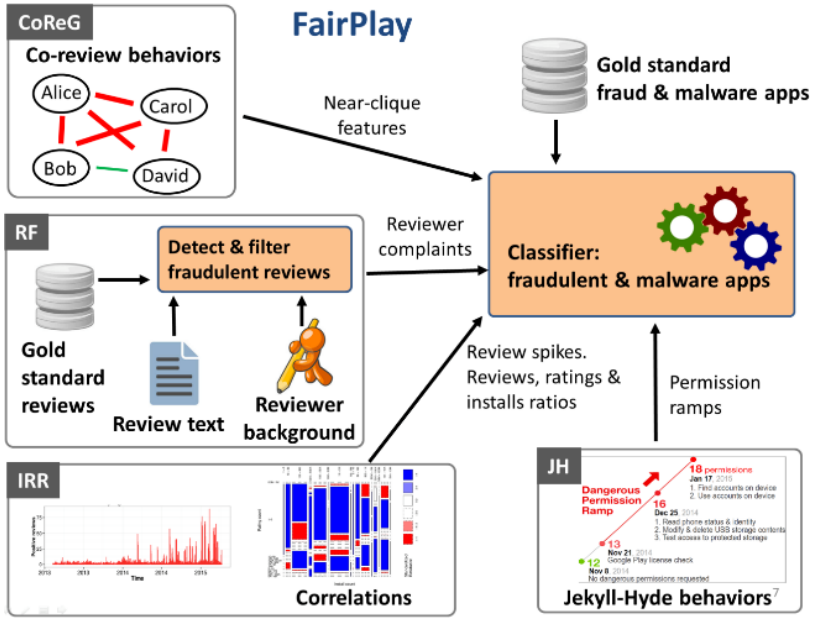
Challenges:

1. Existing techniques unable to curb organized online fraud
2. Fraud originates from resourceful human workers
3. Insufficient fraud behavior data
4. Highly dynamic online services



Solution:

1. Study fraudulent behaviors at intersection of crowdsourcing sites and online services
2. Collect and publish gold standard attributed fraud
3. Design **FairPlay** system to differentiate fraudsters from honest users
4. Design light-weight visualizations that help the user avoid fraudulent products



Scientific Impact:

1. Reveal unique fraud innovations and behaviors of fraudsters
2. Combine linguistic and graph methods to group fraud creators
3. Pave the way to fraud attribution: identify fraud promoters and creators

Broader Impact:

1. Protect people from
   - fake reviews, news
   - malware
2. Sub-projects used in REU and RET programs at FIU, GT
3. Established collaboration with K-8 teacher and students at Norman S. Edelcup/Sunny Isles Beach K-8 school

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