

Economics, Online Markets, and Human Computation

Identifying risky vendors in cryptocurrency P2P marketplaces

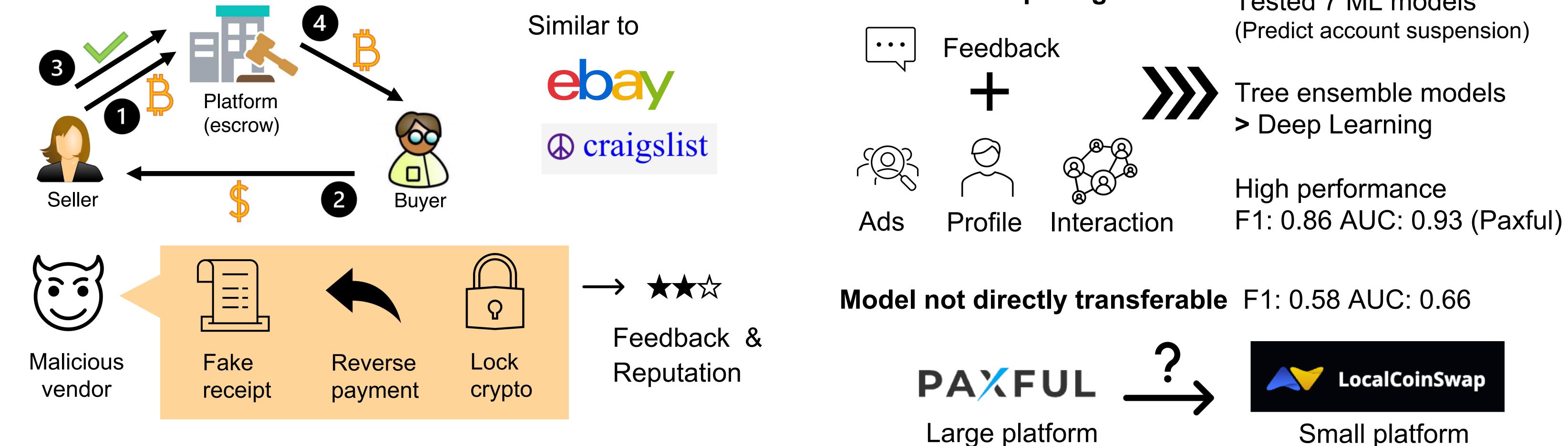
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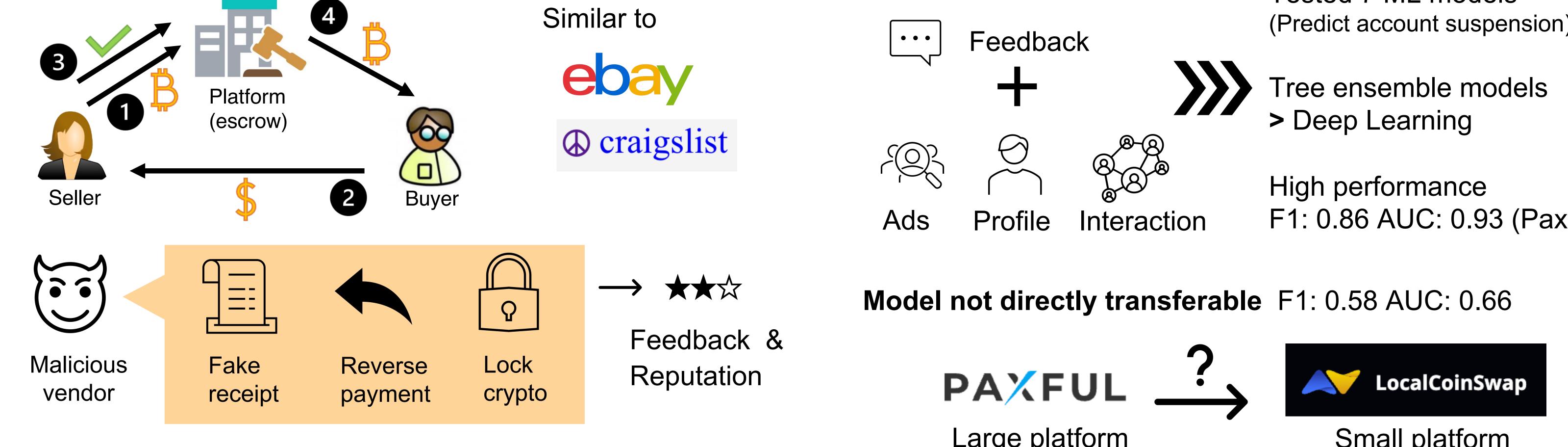
First study of online safety in cryptocurrency P2P marketplaces 1) Illustrate the issues in existing reputation system, proposed the improved mechanism



Full paper

Cryptocurrency P2P markets





Identifying account suspension

Combine multiple signals

Tested 7 ML models (Predict account suspension)

Is a feedback-based reputation system sufficient and credible enough to identify risky vendors?

Common important features – related to self-promoting 1) feedback frequency 2) neighboring users' info

Online evaluation

Data collection







Search page Buy Bitcoin ₿	User page	Ads page
Vendor Payment Price Vendor A Bank transfer m 45,000 USD 200 Gift card 47,000 USD Vendor B Gift card 47,000 USD 200 Mobile payment 44,000 USD 10 10 10	Vendor A +200 -1 300 trades 50 trade partners Blocked by 1 people Blocking 5 people Joined 1 year ago	Buy Bitcoin (w/ Bank Transfer) Offer 45,000 USD Feedback User A User A Jun 26 2023 11:58:30

Year long data collection (06/2022--06/2023)

Is feedback sufficient/credible?

Prepare three sets of 500 users



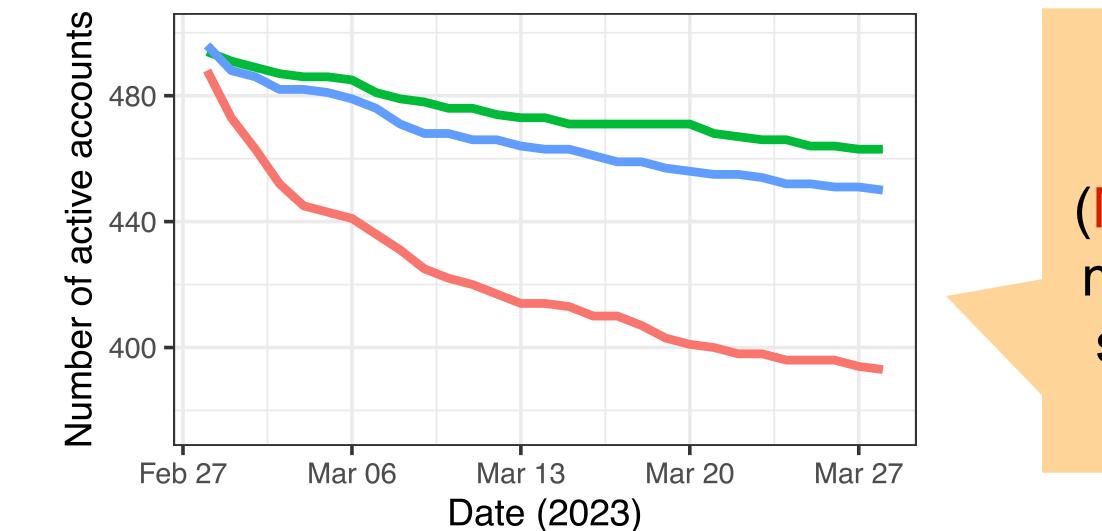
Highest likelihood

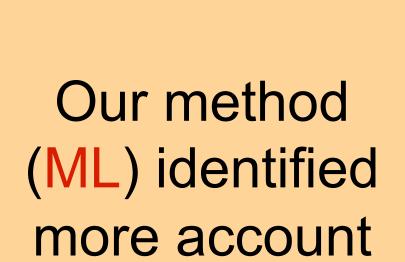
Lowest reputation

Randomly selected

Monitor them for one month (03/2023)

- RANDOM - REPUTATION ML





1. Non-scam related feedback

2. Self-promoting attacks – user collusion & bots

How can we better extract the risk associated with each vendor?

Category	Ratio
Scam	55.4%
Slander	14.6%
Slow vendor	12.6%
Mislabeled	5.2%
Asking for feedback	5.2%

Categories of negative feedback

suspensions

Figure: Num. of active accounts for each group

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