

## **Application of Machine Learning for Meme Coin Scam Detection**

*Yingxi Huang*

Rising technologies enable people to create, list, and trade cryptocurrencies much easier, cheaper, and faster. However, the low entry barriers and censorship-free environment are abused by scammers. Many new cryptocurrencies—including meme coins created around memes and inside jokes and have no fundamental values—were devised following the launch and success of these technologies. Leveraging pop culture to attract investors, meme coins are especially vulnerable to scams. This thesis establishes meme coin scam detection models with three classification techniques: logistic regression, random forest, and SVM (support vector machine). I find that the ex-ante characteristics of meme coins can help with predicting scams with an accuracy of around 70%. The most effective characteristics are identified. It's also observed that the random forest technique produces overall better performance on validation data compared to the others under this scenario, yet the best performer on test data varies across the three different dependent variables used to categorize scams.