



THE UNIVERSITY *of* EDINBURGH

## *News Release*

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### **Fake online profiles easier to fish out with new software tool**

People who use fake profiles online could be more easily identified, thanks to a new tool developed by computer scientists.

Researchers have trained computer models to spot social media users who make up information about themselves – known as catfishes.

The system is designed to identify users who are dishonest about their age or gender. Scientists believe it could have potential benefits for helping to ensure the safety of social networks.

Computer scientists from the University of Edinburgh built computer models designed to detect fake profiles on an adult content website. Sites of this type are believed to be heavily targeted by catfishes to befriend other users and gain more profile views.

Researchers built their models based on information gleaned from about 5,000 verified public profiles on the site. These profiles were used to train the model to estimate the gender and age of a user with high accuracy, using their style of writing in comments and network activity.

This enabled the models to accurately estimate the age and gender of users with unverified accounts, and spot misinformation. All details were anonymised to protect users' privacy.

The study found that almost 40 per cent of the site's users lie about their age and one-quarter lie about their gender, with women more likely to deceive than men. The outcome, which underscores the extent of catfishing in adult networks, demonstrates the effectiveness of the technology in weeding out dishonest users.

The study, to be presented at the International Conference on Advances in Social Networks Analysis and Mining in Australia, was carried out in collaboration with Lancaster University, Queen Mary University of London, and King's College London.

Dr Walid Magdy, of the University of Edinburgh's School of Informatics, said: "Adult websites are populated by users who claim to be other than who they are, so these are a perfect testing ground for techniques that identify catfishes. We hope that our development will lead to useful tools to flag dishonest users and keep social networks of all kinds safe."

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