

Web crawler takes aim at child exploitation

November 24 2011

(PhysOrg.com) -- Researchers at Simon Fraser University's International Cybercrime Research Centre hope a tool they've developed to track websites that exploit children can help police better investigate the crime.

A web crawler developed by criminology PhD student Richard Frank allows researchers to collect massive samples – more than 200,000 web pages at a time –while keeping researchers safe from viewing the content.

In their latest study researchers analyzed how the networks are structured and applied various “attack” strategies to determine which would cause the most disruption to such networks.

Frank, who also has a PhD in computing science from SFU, says attack strategies are aimed at those websites that combine two important characteristics. “One is exposure to the public, measured as the number of incoming web links to a given site, and the other, content severity, measured by a scale of the gravity of the images or simply the text found on a website.

“Eventually we hope to understand the life cycle of a website hosting this type of content; when it is created, what content is put on it, how content shifts from one website to another, and how it 'dies',” he adds.

Frank, along with project supervisor Martin Bouchard and researchers Bryce Westlake and Kila Joffres earned an honorable mention at a

recent European informatics conference for their paper Strategies to Disrupt Online Child Porn Networks.

Joffres will now focus use of the web crawler on terrorism websites.

The project is one of several underway at the centre, established in 2008 and now based at SFU Surrey's new Podium 2.

Bouchard, an assistant criminology professor, studies the role of social networks in various criminal career outcomes. He is co-author of two recent books, *Illegal Markets and the Economics of Organized Crime* (2010) and *World Wide Weed: Global Cannabis Cultivation and its Control* (2011).

More information: Paper: at.sfu.ca/TspXaA

Provided by Simon Fraser University

Citation: Web crawler takes aim at child exploitation (2011, November 24) retrieved 26 April 2024 from <https://phys.org/news/2011-11-web-crawler-aim-child-exploitation.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.