



6 MAY 2021

Media Release

GAME-CHANGING DATA PRIVACY TOOL TO SHORE UP SECURE DATA SHARING

A new online privacy tool will help Australian organisations assess the risk of data theft and help ensure targeted and effective cyber security protections are implemented.

Developed as a collaboration between the Cyber Security Cooperative Research Centre (CSCRC), CSIRO's Data61, the Australian Computer Society (ACS) and the NSW and WA Governments, the Personal Information Factor (PIF) is a game-changer in bolstering the security of personal information held by organisations.

"Personal data is key to enhancing the capabilities of products, services and research but protecting the privacy and identity of those who volunteer their information can be challenging," said CSCRC CEO Rachael Falk.

"All it takes is someone's date of birth, gender and postcode to create a new identity online. They also happen to be the most asked questions when people fill out a form, meaning there is a real need to protect them."

Tackling the issue from the perspective of an attacker seeking to identify individuals, PIF's lead researcher Dr Sushmita Ruj of CSIRO's Data61 and her team are developing an artificial intelligence-based planning algorithm to mitigate reidentification risks.

An important component of this algorithm is the concept of the PIF value of a dataset, which measures the risk of disclosure of personally identifiable information. If this value is below a certain threshold, the data can be recommended for release. Based on the risks, the AI-based algorithm suggests data transformation techniques.

"The PIF tool can be used by government and private enterprises who wish to share sensitive data for various analytical purposes," Dr Ruj said. "Sharing this data is important and sharing it securely is vital."

Since March 2020, the NSW Government has been using an early version of the tool to analyse data risks when dealing with the COVID-19 pandemic.

"It's been great to see the original idea of the PIF tool evolve," said Dr Ian Oppermann, NSW Government's Chief Data Scientist. "It shows the power of multi-sector collaboration."

PIF is also being used to examine other data sets in areas **such as** domestic violence. In addition, the Australian Bureau of Statistics has endorsed the PIF tool to manage confidentiality of its microdata.

The tool is freely available here - <https://github.com/PIFtools/piflib>

For media enquiries please contact: Amber Austin-Wright - 0478 778 060