Innovation Gateway

Smartphone App Security Risk Assessment

Applications

- Mobile device applications
- Smartphone security
- Expert reviews for applications

Advantages

- Allows users to make safer decisions on downloadable applications
- Grants user access to set permission control limits on applications
- Intelligent dynamic learning that predicts app risk
- Utilizes crowdsourcing from expert and non-expert users
- Recommendations generated by a unique algorithm that ranks expert and
- non-expert reviews
- Increases expert framework through voting algorithm

Technology Summary

Dynamic Learning:

App risk is accessed by monitoring app permission usages over time and between users. Security risks can then be presented before installing an app or when an app begins to act suspiciously.

Crowdsourcing:

Researchers at VCU have produced a system to recommend safety features for mobile apps by crowdsourcing information from expert and non-expert users. Users will be able to maintain security control of each third party downloadable app by choosing settings based on recommendations.

Technology Status

Patent US2017/0061136A1

Related Publications:Rashidi 2014Rashidi 2015aRashidi 2015bRashidi 2016

This technology is available for licensing to industry, for further development and commercialization.

Risk Alert Telegram Resource Access **Risk Levels** Telegram usage of: Your personal information - Phone state and identity Camera Do you allow it? Your messages ✓ Your location Estimated risk level Network communication ✓ Storage Never ask me again for this Phone state and identity resource.

Check all you want to monitor

Access request	
Line request access:	
- Phone state and identity	
Do you agree?	
RecDroid Recommendation: Agree	
Our Confidence:	High 📥
Never ask me again for this application.	
Disagree	Agree

Block

Allow

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