

Research Impacts (As of August 31st 2009)

<http://scholar.google.com/scholar?q=brent+byunghoon+kang>

Malware research results and impact on real world:

1. Kang has explored a series of botnet mitigation approaches directed toward **analyzing botnet protocols** and **designing an effective enumerator** based on the analysis. The resulting enumerations are used for spam blocking, firewall configuration, DNS rewriting, and alerting sys-admins regarding local infections through email and direct contacts.
(The team also notified ITS at UNCC when infections were found at the UNC Charlotte Network and other UNC universities.)
2. When you **search for “Waledac Protocol” on search engines such as google, our research blog on Waledac appears at the top.**
<http://www.google.com/search?q=Waledac+Protocol>
3. Anti-virus vendors (such as TrendMicro report) have used the team’s research result to understand the nature of Waledac protocol.
4. The work on **Storm peer-to-peer botnet**, and the initial results were presented as the first opening paper in *USENIX First Workshop on Hot Topics in Understanding Botnets (HotBots)*.
5. When you **search for “peer to peer botnet” on search engine such as google, our HOTBOT 07 paper appears at the top.**
<http://www.google.com/search?q=peer%20to%20peer%20botnet>.
6. The paper has been featured in [PC World](#), [E Week](#), [Tech World](#) and [Symantec News](#).
7. **Google Scholar shows 81 citations**
<http://scholar.google.com/scholar?cites=2048079897991465875&hl=en>

ACM portal shows citations by ACM publications.
<http://portal.acm.org/citation.cfm?id=1323129&dl=GUIDE&coll=GUIDE&CFID=49600286&CFTOKEN=93914426>
8. The HOTBOT07 paper was also cited in the CRS Report for Congress “Botnets, Cybercrime, and Cyberterrorism: Vulnerabilities and Policy Issues for Congress” <http://openocrs.com/document/RL32114/2008-01-29/>
9. The Conficker research result is being used by defender community for tracking and assessing the Conficker malware infections.
<http://spartanlaser.gtisc.gatech.edu/reports/>

10. Recently, the cyber defense organizations in the countries such as Korea and Spain have asked Kang to assess the botnet infections in their countries.

Anti-spam research impact on real world:

11. RepuScore and its SpamAssassin plug-ins have been **deployed at several organizations including an ESP (Email Service Provider), a local IT company, and a college in Oregon** (<http://www.repuscore.org/>).
12. Kang's work on Privilege Messaging was **presented as the opening paper at USENIX Conference on Large Installation System Administration (LISA) in 2007.**

Previous work on decentralized data concurrency and security:

- <http://scholar.google.com/scholar?q=brent+byunghoon+kang>
13. The dissertation work has been published in Proceedings of 23rd International Conference on Distributed Computing Systems, "Hash History Approach for Reconciling Mutual Inconsistency,"
 14. **Google scholar shows** that this paper **has 35 citations** from other publications" as of Aug 31st 2009.
<http://scholar.google.com/scholar?q=brent+byunghoon+kang>,