Security and Emotion: Sentiment Analysis of Security Discussions on GitHub

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SEC NEG:
“Blocking a handful of very specific exploits is less useful, it gives the appearance of security when there may be many other vulnerabilities not protected against.”

SEC POS:
woot! one more exploit gone!
Security = more negative emotions

Similar results
- commits/pull requests
- individual comments/discussions
Glossary of Key Information Security Terms

Co-occurring tags

Final list of security terms

Security/other comments

Security/other discussions

NLTK

Neutral %

Pos/Neg %

exploit, ldap, spoofing,
Challenge data ≠ GitHub

Recognition of security comments/discussions might be imperfect

NLTK was trained on movie reviews & tweets

Commit messages were cut to 256 characters