Risk detection in OSS teams with NLP



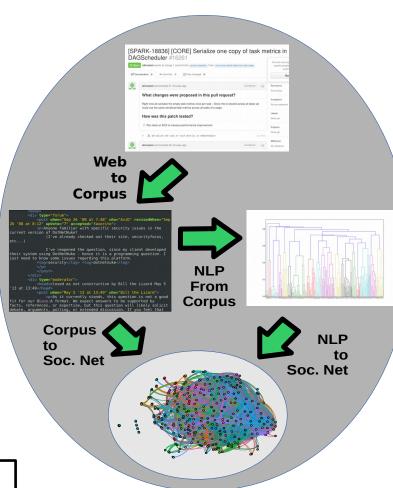
Challenge:

- Identify developers likely to commit files with vulnerable code by their linguistic profile
- Process mixed (code/English) messages

Solution:

- NLP analysis of developers' messages plotted onto social network.
- Specialized parser capable of processing code "snippets"

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Scientific Impact:

- "High risk" developers' files can be given priority by security experts checking the program
- Understand social dynamic factors that contribute to development of unsafe code.

Broader Impact:

- Making OSS more trustworthy
- Building infrastructure for interdisciplinary research in cybersecurity
- Training next generation of researchers