

CRII: SaTC: Improving Computer Security Technologies through Analyzing Security Needs and Practices of Journalists

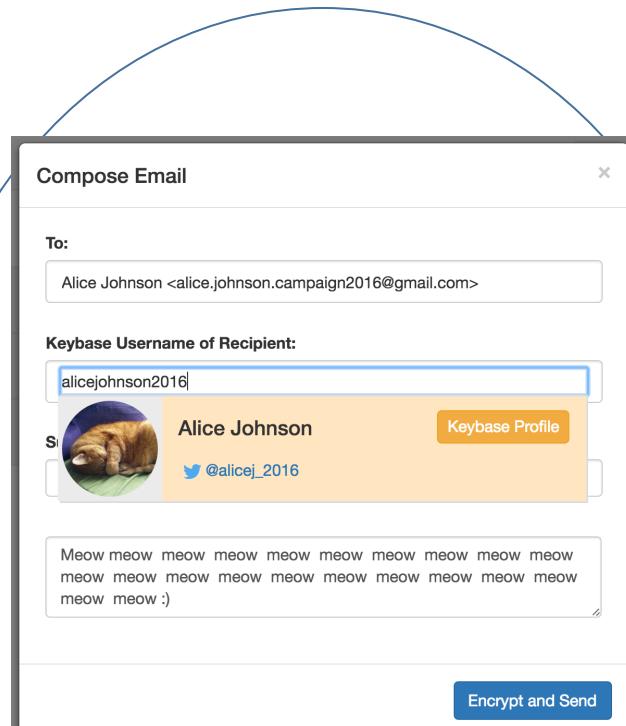
Challenge:

- Security weaknesses in digital communications technologies have put journalists and their sources increasingly at risk.
- Though the computer security community often thinks of journalists as potential beneficiaries of our technologies, we lack a deep understanding of their needs and threat models.

Solution:

Two phases:

- Investigate the computer security needs, concerns, motivations, use cases, mental models, and pitfalls of journalists through in-depth interviews.
- Design and implementation of a more usable encrypted email tool, Confidante.



Confidante, an encrypted email client built on Keybase, evaluated with journalists and lawyers.

Scientific Impact:

- Bridge the gap between the computer security and journalism communities, to ground the designs of future secure communication tools for journalists and similar user groups.
- Explore a new point in the design space for usable encrypted email, leveraging Keybase (<https://keybase.io>) for key distribution.

Broader Impact:

- Improved security for journalists and their sources will help protect freedoms of speech and of the press.
- Our lessons apply beyond journalists to other groups conducting sensitive communications, e.g., lawyers.
- Planned public release of Confidante, more usable encrypted email tool.
- Research experiences for graduate and undergraduate students.