Secure Messaging? More Like Secure Mess

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People come to secure messaging for different reasons.

And developers have to balance conflicting priorities.

Security
Usability
Accessibility
Growth


LINE

There is **no single secure messenger** to rule them all.

Outline

- User personas
- Mapping features onto concerns
- Policy choices
- Questions to leave with

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Journalist

Motivation: protect sources; avoid getting scooped

Technical proficiency: has institutional resources available for support

Bandwidth: doesn't have time to manage their own IT

Priorities: physical compromise, cannot risk "misfires"

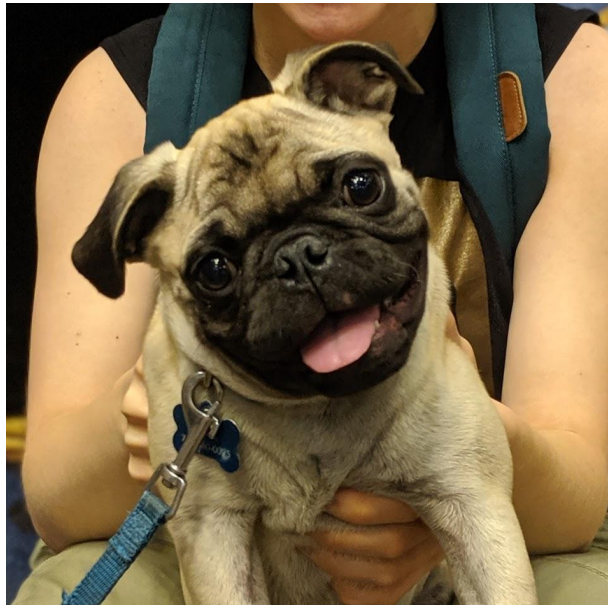
Therapy Client

Motivation: communicate with therapist; worried about rumors of WhatsApp contacts showing up in Facebook friend recommendations

Technical proficiency: average

Bandwidth: can take a little time to set things up, but doesn't have time for repeated tasks

Priority: phone number privacy



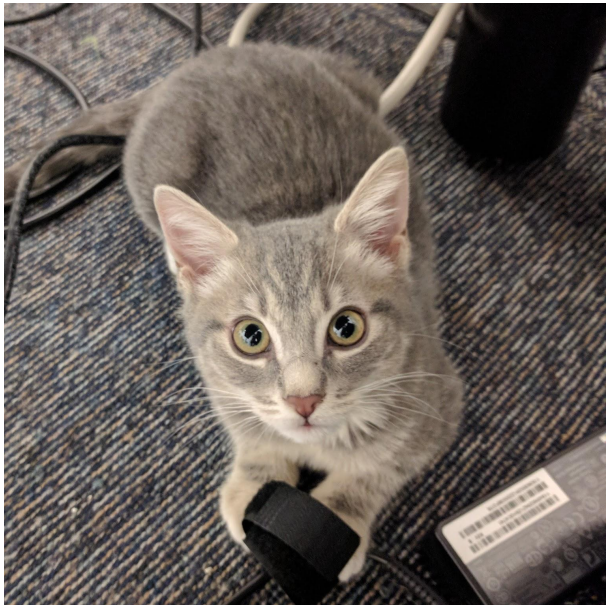
Open source maintainer

Motivation: wants to attend hacker conferences professionally; wants to be protect phone number

Technical proficiency: professional

Bandwidth: can spend some time and effort setting things up

Priorities: physical compromise, phone number privacy




user testing

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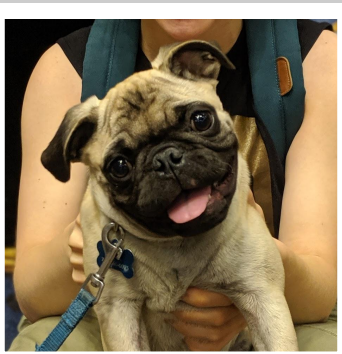
Physical compromise

Journalist



Therapy Client

Open Source Maintainer

EFF

Physical compromise

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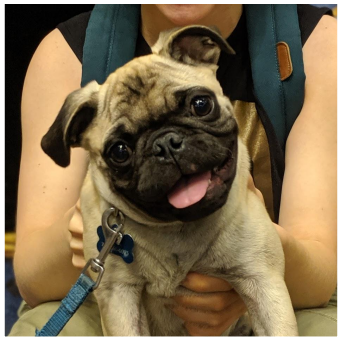
Message ephemerality

Journalist



Therapy Client

Open Source Maintainer

Phone number privacy

Journalist

Therapy Client

Open Source Maintainer

EFF

Phone number privacy

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Aliases or usernames

Journalist

Therapy Client

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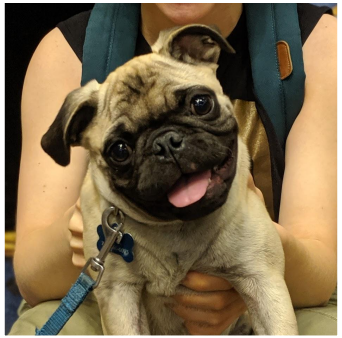
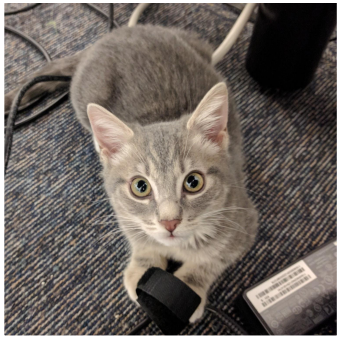
Cannot risk “misfires”

Journalist



Therapy Client



Open Source Maintainer

Cannot risk “misfires”

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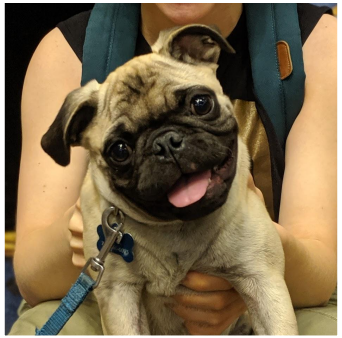
Key verification and single-mode

Journalist



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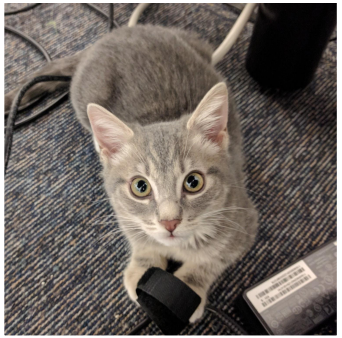

Open Source Maintainer

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Crypto is the **easy part**.

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client-side scanning

sec *g* (n): no one but you ended recipients can read your messages or otherwise analyze their contents to infer what you are talking about

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Don’t ask, “What new secure messenger should I build from scratch?”

Instead, ask, “**How can I help improve the ones that already exist?**”

Don’t ask, “What is the perfect combination of features?”

Instead, ask, “**What is the right combination for particular use cases?**”

Don’t just ask, “Who is this tool meant for?”

Also ask, “Who uses it, and **how do those imagined and real groups overlap?**”

Thank you

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EFF

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  - Phone number privacy
  - Key verification and single-mode
- Policy choices
  - Law enforcement “ghost”
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