

**The
Alan Turing
Institute**

Espresso Martini – re-decentralization redux

Jon Crowcroft, 24.4.25



Availability

- Cloud sets the standards/expectations!
 - Typically 3 fold (nowadays, wide area) replicated
 - Several tools (raft, crdt, append only logs etc)
- How can edge/decentralized match?
 - Measurement (cellular/wifi) suggest 6-fold would do
 - Need to enlist friends/family/social/work network – who to trust... ..?

Trustworthiness

- **Physicality –**
 - co-location for bootstrapping
- **No friend—of-friend, without EEE**
 - Slow to build
 - Hiding meta data is complex
- **Revokation?**
 - Ostracism was a thing in medieval societyⓈ

Usability

- Why Johnny (still) can't encrypt?

Needs to be as seamless as infrastructure

- But it isn't infrastructure

But it can be pervasive

- Some existing systems (wispernet, airtags)

Some nice new protocols (At with PDS support, Activity Pub, DiDs)

Questions?