

**Can privacy be protected on social networks?**

- “Privacy is one of the biggest problems in this new electronic age”  
—Andy Grove

# How Social Media Works

- You make an account on bookface.com
- You agree to a ToS that you don't read
- You give it information like your date of birth, ethnicity, location, friends, enemies, deepest most secret innermost fears and desires, mobile phone numbers, etc.
- All of that is stored on their servers
- That ToS you didn't read lets them do whatever they want with that stuff, without telling you, and without you being able to request its deletion

# When it Goes Wrong

- National security agencies known to trawl LinkedIn for people putting project codenames, security vetting keywords, etc. online
  - ICWatch
- Runkeeper defaults to displaying your run routes publicly
- Foursquare has been used to determine when people are away in order to burgle them
- Businesses can use your Facebook photos in billboards and other ads
- Tinder triangulation attack
- Ashley Madison

# Social Media in the Cyber Kill Chain

- OSINT in the Passive Reconnaissance phase...
- ...which can help with with social engineering in the Active Reconnaissance phase...
- ...which can help with spearphishing in the Delivery phase...
- ...and perhaps knowing who to frame and how could even help in the Exfiltration/Cover-Up phase

# Remedies/Snake Oil?

- “Oh, I’ll just lock down my account so only my friends can see me!”
  - But you have 1000 friends and half of them are bots
- “I’ll be conservative with my friends and limit it to 100!”
  - But it only takes one of them with poor security settings to compromise you
- “I’ll change my name on Bookface!”
  - People can search with your phone number

# Remedies/Snake Oil?

- “Right, you’ve convinced me—I’ll delete my Bookface account!”
  - But Bookface will still hold all that data forever and ever (or around about then)
- “I’ll sue them in court, win, get all my data scrubbed and live in the mountains.”
  - But Bookface will still have a shadow profile for you, built from all the friends who let it trawl their phone contacts
- “Technology was a mistake.”
  - Yes.

# Is there any alternative?

- Short answer: not really
- Long answer: maybe?
  - Decentralised social media software
    - e.g. GNU Social, diaspora\*
  - Federation rather than siloisation
  - But a social network can only really survive with mass adoption, which none of these have at the moment
  - More pro-consumer data protection legislation
    - Boy I can't wait to be protected by the EU GDPR legislation—oh wait



# Be a little optimistic though

- Bookface may seem like an unstoppable juggernaut of privacy invasion, that you increasingly have to surrender yourself to in order to function in modern society
- But MyFace was big once too, and that still died