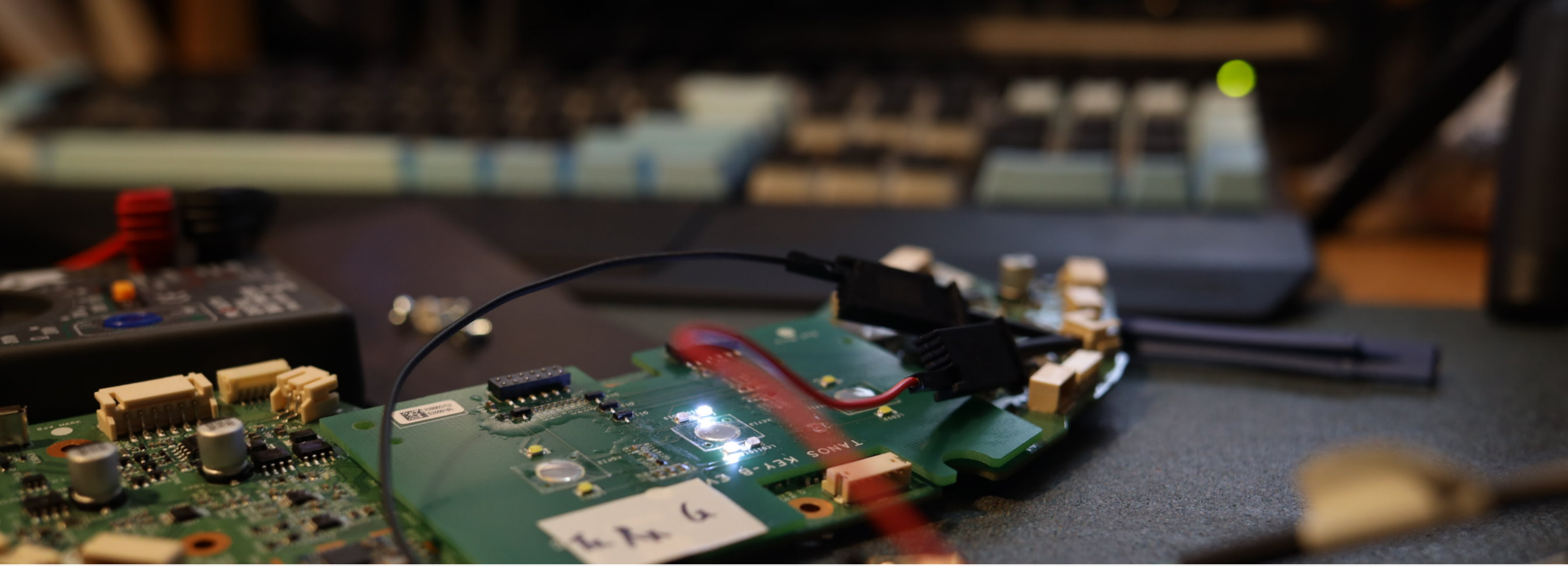

“Smart” Vacuum Cleaners

An Audit Into The Security and Integrity of IoT Systems

Andrew Wong | UNSW Sydney

Today’s Agenda

- Thesis B plan
- Thesis B review
- Thesis B retrospective
- Thesis C revised plan

Statement

How have manufacturers of IoT / smart home devices addressed the increasing concerns of digital privacy and product security?

- Digital Privacy - Investigate the nature of network data (i.e. content, frequency, destination) and how the data is used.
- Product Security - Investigate potential security vulnerabilities and assess the effectiveness of current security fortifications.

Talk about threat models

Talk about thesis A talk about thesis b Talk about thesis c

threat models

work done in thesis c

hooking into code..

Network analysis

Incoming Timeline

- 22T2 W1 - IPv6 SSH verification, continue binary assessment
- 22T2 W2 - WAN traffic analysis
  - Look at network behaviour
  - Try view WAN data pre-encryption / post-decryption
- 22T2 W4 - Update to latest version (and hope we don’t get locked out)
  - Do another vacuum clean, reimage, compare binaries
- 22T2 W5 - Factory reset device, check for remnant files
- 22T2 W8 - Demo submission
- 22T2 W11 - Report submission

Thank You

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