# The Alan Turing Institute



### 5 years of being at the Turing

Aside from being handy for the trains to Europe...

©

#### Structure&Resources

13 University partners 5+ strategic partners (industry&government) Core grant from UKRI/National + funds from partners: projects/programs/collaborations + other grants

public outreach events&interest groups

Research staff, PhD student/interns
Research Engineers <
Academic fellows (like me - part time seconded or visit)
Data Study Groups <

Cloud resource/national data too

#### Interactions & resources - my experience

- Privacy-preserving data analysis
- Data science and digital humanities
- Urban analytics
- Fairness, transparency, privacy
- Data Ethics Group
- Low-dimensional structure in data
- Protocol governance: Blockchain & beyond
- Sampling algorithms for data analytics

- Data!
- PhDs
- Papers
- Projects
- Proposals
- Partnerships
- REG
- Feedback
- Fun

#### Project #1 Maru - Secure Enclaves for Al

- Funded by D&S Program
- Partner with Imperial (not a turing uni then) & Intel
- Customer: NCSC committed&used (tested) code from repo!
- software and papers outputs
- Influenced design of "Safe Haven" (use for DECOVID!)
- intellectual success liaison via MSR Cambridge
- partial failure (sgx;spectre/meltdown)...
- followup influence (ARM & RISC-V enclave support different)...
- Good example of convening power of Turing

#### Project #2 - Trustworthy Digital Identity Systems

- Funded by Gates Foundation at Turing
- partners in World Bank, ID4D, Mosip etc
- just closed call for mini-projects (many good submissions!)
- redirected some effort to support pandemic work on
- secure tracing apps <a href="https://arxiv.org/abs/2004.04059">https://arxiv.org/abs/2004.04059</a>
- immunity certificate ideas <a href="https://arxiv.org/abs/2005.11833">https://arxiv.org/abs/2005.11833</a>
- safe haven and secure analytics for DECOVID&tracing...
- working on different models of "trustworthiness"
- UK is most challenging compared to many developing regions
- Great example of value of REG support...

### Research Mapping Exercise&Tools

- Topic Models sourced from bio, project, papers etc
- PC/RIAC/University Liason expertise
- Crowd sourcing/democratic say
- Bibliometric Studies/NLP
- https://www.turing.ac.uk/research/research-areas
- Watch this space...(e.g. on slack channels...)

## International Collaboration

- Many papers already collaborative
- And open source code
- and talks/conference events
- Startups (at least 2)
  - ikva.com & quine.sh
  - also ties with
  - https:// cognitionx.com/

- really just getting going
- slightly stalled by pandemic (and brexit)
- Startup ideas
  - seed money competitions
  - free up IP
  - staff contract flexibility
  - local VC culture
- https://www.turing.ac.uk/ collaborate-turing