# The Alan Turing Institute

# Responsible AI for safeguarding human rights: tackling modern slavery

Anjali Mazumder, Al and Justice & Human Rights Theme Lead Al for Good Summit, 23 February 2021

Defence and Security	Public Policy	AI (safe and ethical)	Finance	Data- Centric Engineering	Urban Analytics	Environment	Health	
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Humanitarian needs are growing with the number of displaced, marginalised and vulnerable people being higher than it ever was before.

- Approximately 79.5m people were displaced in the world in 2019 nearly 1% of humanity.
- Over a billion people are without legal identity.
- It has been estimated that over 40m people are in modern day slavery a human rights abuse at any given time.
- Nearly half of human trafficking victims are women, and 35% of women globally have experienced physical or sexual violence at some point in their lifetime.
- Socio-economic or political instability, coupled with environment and emergencies increases those already in precarious situations to further harm and marginalisation, and exposes a new vulnerable group to harm and marginalisation.
- Women and girls, rural dwellers, ethnic minorities, people with disabilities, migrants and refugees, and the LGBTQ community are systematically excluded and denied human rights, and deprived of opportunities and equitable benefits of societies and economies.





# Estimated 40.3M people in modern slavery, with estimates of modern slavery in supply chains amounting to \$150B of illicit profits per year

## Themes



### Problems (Modern Slavery)





People enslaved at sea aren't captured by current approaches and are in effect "off-grid"

## Labour exploitation at sea

**Policy question:** 

- What is the scale of forced labour or labour exploitation at sea?
- What are drivers and factors?

#### **Operational question:**

 How can we detect and prevent potential risk of exploitation at sea? (monitoring, tracking and detecting)

#### **Opportunity and issues:**

- estimating slavery through remote sensing, fish capture data
- determining utility and ground truth
- drawing together different data sources with complex spatiotemporal processes, and structured & unstructured data
- incorporating drivers and factors (e.g. climate, economics)
- understanding needs of front-line agencies and inspectors

**SDG 14.4** effectively regulate harvesting and end over fishing, illegal, unreported, and unregulated fishing and implement science-based management plans...





# Traffickers profit hugely from modern slavery – estimate £150bn

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#### **Challenge and Opportunity 1**

(Disrupt illicit financial flows): The use of financial transaction data can be used to detect and prevent further exploitation of individuals and systems: SARs and understanding features.

**Challenge and Opportunity 2** (Improve situational awareness): Law enforcement have intelligence that can inform potential networks.

**Challenge and Opportunity 3** (Sparse Ground Truth): ML/AI methods require ground truth which may be limited

**Challenge and Opportunity 4** (Data Flows): Barriers to data flows between financial services and the public and non-profit sector who are on the frontline to tackling modern slavery.

# How can we leverage public and private data to tackle modern slavery?



**SDG 5.2** eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation



# Of the 24.9 million forced labour victims estimated in 2016, 4.8 million were estimated victims of forced sexual exploitation



#### **Research Questions (sample)**

#### POLICY & STRATEGY

What is the scale and nature of sexual exploitation (a modern slavery typology) online?
What are key drivers and trends?

#### OPERATIONAL

 Which features (language, images, ad data) suggest exploitative activity or behaviour?

How do we identify individuals (perpetrators, users) to disrupt exploitation whilst safeguarding victims?
How do we get better situational awareness by linking open/sensitive data, e.g. companies house, NGO data?

#### LEGAL

- What are the jurisdictional challenges in addressing exploitation and recruitment online?
- What evidence is needed to link digital footprint to actors?
- What are the legal issues arising from investigation to admissibility in courts of digital (footprint) data?

#### ETHICAL & HUMAN RIGHTS CONSIDERATIONS

 PRIVACY: What is the privacy risk to the individuals in the ads? And to linking multiple sources of data? What if an adult is not an adult?

What is the psychological impact for the researcher?

#### BUILDING TRUST: INCLUSIVE & RESPONSIBLE

FAIRNESS: What are potential biases in data sources, what is captured, missing?

TRANSPARENCY/EXPLAINABILITY: How does it work? Are categorisations clear? How is it decided? RELIABILITY/ROBUSTNESS: How does the tool perform under similar and different conditions? SUSTAINABILITY & SECURITY: How will the tool be updated, monitor drift/shifts, and maintained etc?

#### Participatory AI for Tackling Sexual Exploitation Online





Data is sitting in silos, across Government, NGOs and the private sector – difficult to understand scale of a problem and design suitable interventions as data cannot be shared across boundaries

# **Enabling Privacy, Security & Trust for Innovation**





Availability

**SDG 16.10** Ensure public access to information and protect fundamental freedoms

**SDG 16.a** Strengthen international cooperation, for building capacity at all levels to prevent violence and combat terrorism and crime ... humanitarian and human rights at core

## **Our vision**

We envision a world that is more safe, fair, just and inclusive for all.

We believe that **new forms of data and data flows**, **new algorithms** and **multi-sector and multi-disciplinary collaborations** are the key to this future:



Responsible and Inclusive Data and AI Principles

# Meet the team (Hidden Figures)





























# The Alan Turing Institute

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