

[7th Annual SYP Conference: 'AI, Peace and Security']

# The use of AI-powered technologies in the UN's efforts to promote peace and security globally

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27 January 2024

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## Background and Overview



# Background

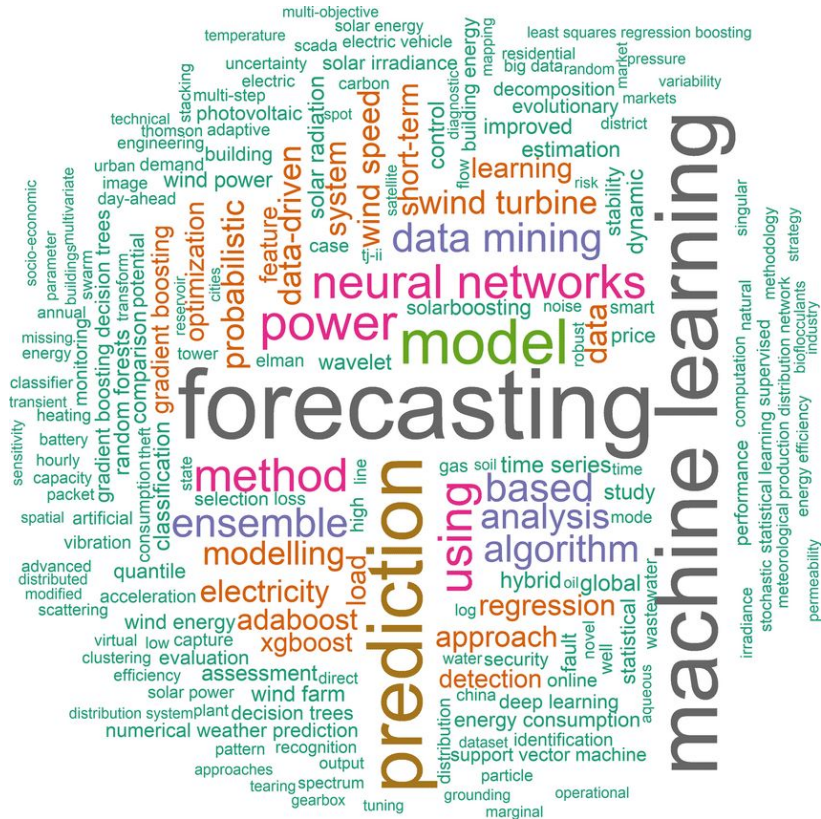
## Myself

- Sarah Weiler
- Research Fellow with [GPRG's AI Governance program](#)
- MSc China & International Relations
- Diverse research experience
  - Interested in Global Politics, Global Catastrophic Risk Studies, Democratic Theory & Practice, Philosophy of Knowledge

## The presentation's origin

- Context: internship with UN OCHA, Oct 2023 - Jan 2024
- Project goal: Overview of past and ongoing UN activities related to the responsible and effective adoption of AI and AI-powered tools
- Output: database of guidelines, working groups, ongoing projects, AI use cases, and training resources ([open access](#))

# AI x UN x peace & security -- complexity abounds



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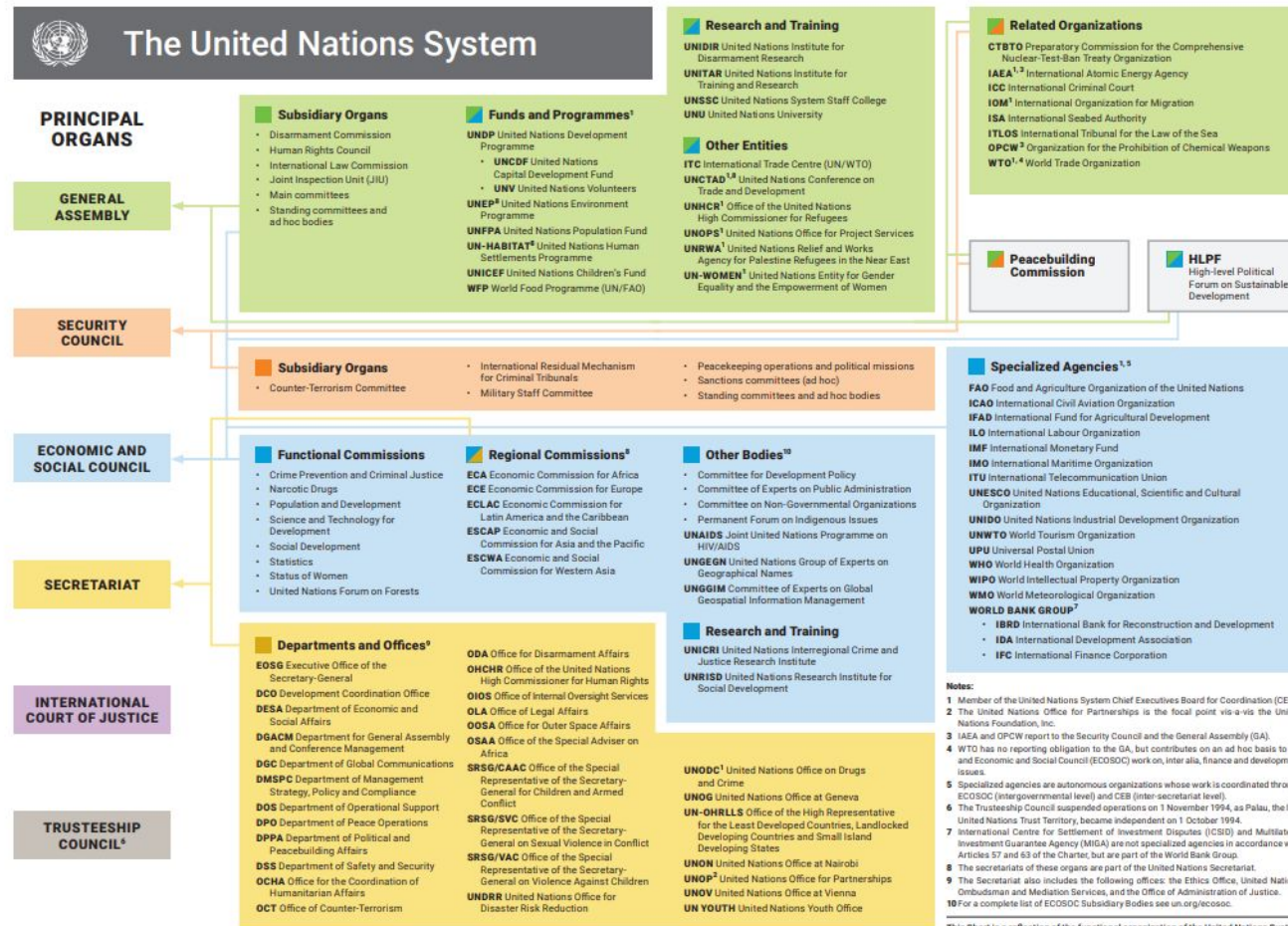
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# AI x UN x peace & security -- complexity abounds

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solar power wind farm  
distribution system plant decision trees  
numerical weather prediction  
pattern recognition  
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selection loss  
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comparison  
potential  
gradient  
boosting  
tower  
probabilistic  
cities  
optimization  
reservoir  
stacking  
multi-step  
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estby and Strand, 2014

**Notes:**

- 1 Member of the United Nations System Chief Executives Board for Coordination (CEB)
- 2 The United Nations Office for Partnerships is the focal point vis-à-vis the United Nations Foundation, Inc.
- 3 IAEA and OPCW report to the Security Council and the General Assembly (GA).
- 4 WTO has no reporting obligation to the GA, but contributes on an ad hoc basis to GA and Economic and Social Council (ECOSOC) work on, inter alia, finance and development issues.
- 5 Specialized agencies are autonomous organizations whose work is coordinated through ECOSOC (intergovernmental level) and CEB (inter-secretariat level).
- 6 The Trusteeship Council suspended operations on 1 November 1994, as Palau, the last United Nations Trust Territory, became independent on 1 October 1994.
- 7 International Centre for Settlement of Investment Disputes (ICSID) and Multilateral Investment Guarantee Agency (MIGA) are not specialized agencies in accordance with Articles 57 and 63 of the Charter, but are part of the World Bank Group.
- 8 The secretariats of these organs are part of the United Nations Secretariat.
- 9 The Secretariat also includes the following offices: the Ethics Office, United Nations Ombudsman and Mediation Services, and the Office of Administration of Justice.
- 10 For a complete list of ECOSOC Subsidiary Bodies see [un.org/ecosoc](http://un.org/ecosoc).

This Chart is a reflection of the functional organization of the United Nations System and for informational purposes only. It does not include all offices or entities of the United Nations System.



## AI in the UN's promotion of negative peace

# The UN's promotion of negative peace





# The UN's promotion of negative peace



## Fighting the misuse of AI in the military realm

Research, dialogue, advocacy



## Disarmament and arms trading

AI-assisted monitoring and verification



## Peacekeeping and peacebuilding

Research, dialogue  
AI-assisted data analysis  
AI-enabled Digital Dialogues



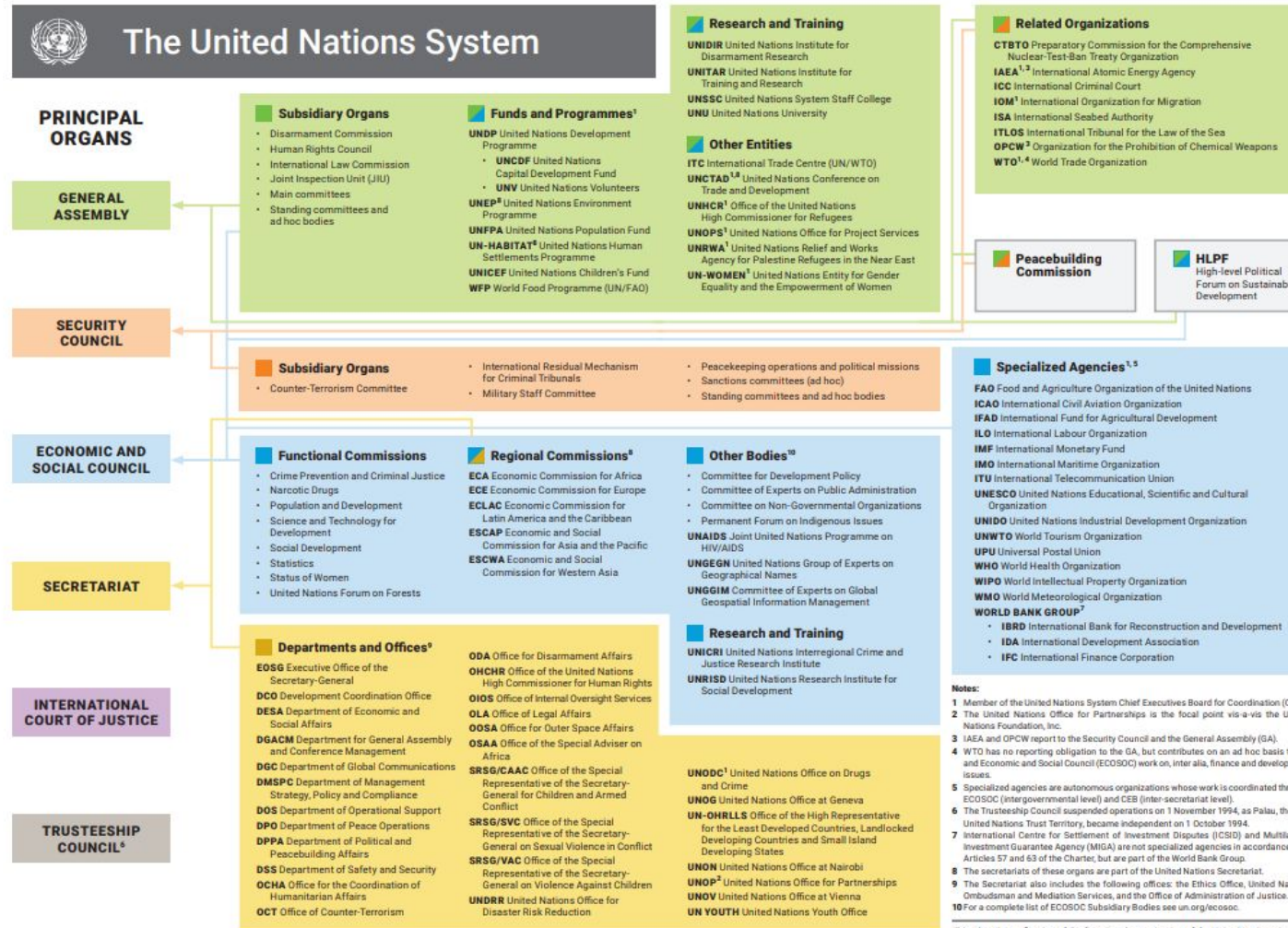
## AI in the justice sector

Research and analysis  
Guidelines, guardrails



## AI in the UN's promotion of positive peace

# The UN's promotion of positive peace



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# Using AI constructively and responsibly



## Predictive analytics

E.g.: Flood forecasting



## Situational awareness

E.g.: Analysis of infrastructure damage after a disaster



## Information management

E.g.: Identification of relevant documents ahead of a negotiation



## Governance (global and UN-internal)

E.g.: Principles of a human-centric approach to AI



**My takeaways, and thoughts on  
where to go from here**



# Takeaways

## A cause for hope, but also a call to action

- Challenge: information management
  - Rapid AI developments
  - Lack of expertise and established frameworks
  - Lack of regulation and oversight
  - Complexity of real-world environment -> complexity of UN efforts
- How to contribute?
  - Need for further research
  - Need for responsible tech development geared towards UN activities & SDGs
  - Need for tech-savvy and ethics-aware personnel at the UN
  - Need for critical observation and commentary outside the UN

# Takeaways

## Core sites to learn more

- Annual report: [United Nations Activities on Artificial Intelligence \(AI\)](#)
- UN DPPA-DPO: Futuring peace ([website](#), [blog](#))
- Upcoming conferences
  - [Global Forum on the Ethics of Artificial Intelligence 2024](#) (5-6 Feb 2024)
  - [UNU Macau AI Conference 2024. AI For All: Bridging Divides, Building A Sustainable Future](#) (24-25 April 2024)
  - [AI for Good Global Summit 2024](#) (30-31 May 2024)
  - [Summit of the Future](#) (22-23 Sep 2024)

# THANK YOU :)

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## **Annex: More details on UN efforts to promote negative peace**

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# The UN's promotion of negative peace



## Fighting the misuse of AI in the military realm

Research, dialogue, advocacy



## Disarmament and arms trading

AI-assisted monitoring and verification



## Peacekeeping and peacebuilding

Research, dialogue  
AI-assisted data analysis  
AI-enabled Digital Dialogues



## AI in the justice sector

Research and analysis  
Guidelines, guardrails



# Fighting the misuse of AI in the military realm (UNIDIR, UNODA, UNSG, etc.)

## Research, dialogue, advocacy

- UNIDIR's Security and Technology Programme, [AI and Autonomy workstream](#)
- UNODA and Sipri's "Responsible Innovation in AI for Disarmament, Arms Control and Non-Proliferation" project
- Secretary-General's "Report on current developments in science and technology and their potential impacts on international security and disarmament efforts", delivered to the General Assembly
- Global governance initiatives



The 2022 Innovations Dialogue: AI Disruption, Peace and Security (Conference Report)

1 May 2023



Artificial Intelligence Beyond Weapons: Application and Impact of AI in the Military Domain

11 October 2023

# Disarmament and arms trading

(CTBTO, IAEA)

## AI to assist monitoring and verification

- AI-assisted signal detection
  - E.g.: Seismic aftershock monitoring to detect weapons tests
  - E.g.: Anomaly detection in satellite images of nuclear power plant inspection sites
- AI-assisted information management and data analysis
  - Processing of safeguards-relevant documents and data
  - Network processing of detected signals to analyse their likely cause (weapons testing vs. natural vs. other)

**Limitations to accuracy and precision:** AI is an aid, not a replacement of human monitoring

# Peacekeeping and peacebuilding (UNDPPA)

## Research, analysis, discussion

- [Futuring peace](#) blog
- Reports (e.g.: [Digital technologies and mediation](#))
- [Stakeholder dialogues](#)
- [AI Innovation workshops](#)
- [Technology debates](#)
- Digital transformation at the UN:  
[Innovation Space @UNHQ](#)



# Peacekeeping and peacebuilding (UNDPPA)

## Data management & analysis

- [Diplomatic Pulse](#): searchable document repository
- [Peace & Security Data Hub](#)
- [Geospatial analysis](#) of conflict sites
- [Sparrow](#): Social Media analysis
- [E-Analytics toolbox](#)

## Digital dialogues

“Talking peace” series: Live translation, summarization, and coordination of mass consultation with local populations

Successful pilots in [Yemen](#) (2020), [Iraq](#) (2021), [Bolivia](#) (2021-22), [Lebanon](#) (2022)



# AI in the justice sector

## UNICRI: research and analysis

- [AI Toolkit](#) to inform Responsible AI Innovation in Law Enforcement
- [AI for Safer Children initiative](#)
- AI in Counter-terrorism
- [Policy Framework for Responsible Limits on Facial Recognition](#)



### Factsheet

February 2023



#### What Is the Toolkit

The *Toolkit for Responsible Artificial Intelligence Innovation in Law Enforcement* is a practical guide for law enforcement agencies on developing and deploying AI responsibly, respecting human rights and ethics principles.

It is being jointly developed by UNICRI's Centre for AI and Robotics and INTERPOL's Innovation Centre, with the financial support of the European Union



#### Who Is It for

The Toolkit is designed for *law enforcement agencies worldwide* interested in, exploring or already using AI.

It can also guide and inform:



*Technology Developers*



*Human Rights Advocates*



*Criminal Justice Practitioners*



*General Public*





## **Annex: More details on UN efforts to promote positive peace**



# Using AI constructively and responsibly



## Predictive analytics

E.g.: Flood forecasting



## Situational awareness

E.g.: Analysis of infrastructure damage after a disaster



## Information management

E.g.: Identification of relevant documents ahead of a negotiation



## Governance (global and UN-internal)

E.g.: Principles of a human-centric approach to AI

# Using AI constructively: Some examples

## Predictive analytics

- Goal: preventive action
- Method: machine learning
- Examples
  - Flood forecasting
  - Forecasting migration flows
  - Forecasting food insecurity

## Situational awareness

- Goal: more effective crisis response
- Method: geospatial analysis, social media analysis, pattern-matching, signal detection
- Examples
  - [WFP's Hunger Map](#)
  - [PulseSatellite](#): A tool using human-AI feedback loops for satellite image analysis in humanitarian contexts

# Using AI constructively: Some examples

## Large Language Models

- LLMs for information management
  - Chatbots to query document repositories
  - Chatbots to analyze spreadsheet data
  - LLMs to clean and merge disparate data sources
- LLMs in daily admin work
  - Chatbots to help fill out forms
  - Automation of repetitive tasks
  - Meeting transcription, summarization, and generation of action items

# Using AI responsibly: Some examples

## Global Governance

- Ethical guidance and monitoring
  - Fundamental principles: [UNESCO](#)
  - Refugee rights: [UNHCR](#)
  - Children's rights: [UNICEF](#)
  - Women's rights and gender issues: [UNFPA](#), [UN Women](#), [UNESCO](#)
- Convening conferences and stakeholder dialogues
  - [Global Forum on the Ethics of Artificial Intelligence 2024](#) (5-6 February 2024)
  - [UNU Macau AI Conference 2024. AI For All: Bridging Divides, Building A Sustainable Future](#) (24-25 April 2024)
  - [AI for Good Global Summit 2024](#) (30-31 May 2024)



# Using AI responsibly: Some examples

## UN-internal use

- Ethical and operational guidance
  - Principles for the Ethical Use of Artificial Intelligence in the United Nations System ([UNSCCEB 2022](#))
  - Navigating the issues and risks of generative artificial intelligence (AI) in the workplace (WHO Information Note, 2023)
- Knowledge exchange and best practices
  - UN Generative AI Practice Group (Teams group)
  - [United Nations Innovation Network](#) (UNIN)
  - [UN Geo-AI Working Group](#)