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## FROM COLONIAL BOTS TO INDIGIAI: THE COMPLEX ROLE OF AI IN INDIGENOUS ADVOCACY

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### INTRODUCTION

What is artificial intelligence? Artificial intelligence (AI) is the capacity of machines to replicate human thought processes. What is intelligence? Intelligence is the ability to learn, process information, and make decisions. These decisions are made based on a database. Humans are born with intelligence, allowing us to think by processing information in our minds, which we can describe as human intelligence. We acquire knowledge daily, categorize it, and store it in what can be called our brain's "natural database." Sometimes, we get confused because our natural database lacks information needed to answer a particular question. For example, imagine you just heard a new language and the robot inside you responds, "Umm... sorry, I am missing the database to process this audio." Artificial intelligence involves more than just the ability to communicate with robots; it enables a machine to see, hear, speak, and process information to make decisions. The robots we interact with on our computers are known as Large Language Models, and OpenAI's ChatGPT is one of them.

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When I talk to people about AI, many worry about losing their jobs. But will AI really take away our jobs? Let's think about this using an example you might know. Remember when Microsoft Excel started to do calculations for us? Did accountants lose their jobs because of it? No, they didn't. Instead, Excel helped them do their basic tasks faster, which let them focus on more important and complex work that machines can't do. Just like Excel, AI might change how we work, but it won't take away all our jobs.

## **I. INDIGENOUS PEOPLES' INTERNATIONAL HUMAN RIGHTS SEARCHABLE DATABASES**

At the James E. Rogers College of Law, the University of Arizona's Indigenous Peoples Law & Policy Program (IPLP) provides two searchable databases important for understanding Indigenous rights. One database catalogs recommendations from various human rights groups like the UN human rights mechanisms and the Permanent Forum on Indigenous Issues about violations regarding protected areas and conservation.<sup>2</sup> The other focuses on the activities of the United Nations Special Rapporteur on the rights of Indigenous Peoples.<sup>3</sup>

These databases are invaluable resources for anyone interested in Indigenous legal rights and international jurisprudence. They include a variety of materials such as legal documents, multimedia, and educational resources suitable for academics, researchers, and the general public. Thanks to advanced search features, users can easily look up specific information using keywords related to their interests, such as the name of a tribal community or specific human rights issues. This detailed search capability helps Indigenous Peoples and advocates use these documents as references in domestic legal cases.

## **I. INTRODUCTION TO THE UNITED NATION SPECIAL RAPPORTEUR ON THE RIGHTS OF INDIGENOUS PEOPLES**

IPLP hosts the University of Arizona website developed for the United Nations Special Rapporteur on the Rights of Indigenous Peoples (UNSRRIP). The UNSRRIP website is tailored to be user-friendly and easily accessible for grassroots Indigenous communities, organizations, researchers, human rights advocates, and other stakeholders globally. It offers a wealth of resources related to human rights, including a searchable database of country visit reports, statements, communications, as well as the latest news and activities from the current UNSRRIP, José Francisco Calí Tzay, and his three predecessors. The UNSRRIP website aims to provide up-to-date and pertinent information about the UNSRRIP's work and complements the official UN Special Rapporteur's webpage hosted by the Office of the United Nations High Commissioner for Human Rights.<sup>4</sup> The UNSRRIP's mandate is to monitor, report, and advise on the situation of Indigenous Peoples' rights across the globe. This role includes investigating

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<sup>2</sup> The recommendations database is available at <https://indigenous.arizona.edu/database>.

<sup>3</sup> The UNSRRIP database is available at <https://un.arizona.edu/search-database>.

<sup>4</sup> U.N. Human Rights Office of the High Commissioner, *Special Rapporteur on the rights of Indigenous Peoples*, <https://www.ohchr.org/en/special-procedures/sr-indigenous-peoples> (last visited Apr. 21, 2024).

alleged violations of these rights, promoting best practices, and making recommendations to governments and international bodies to improve policies and practices that affect Indigenous communities.

## **II. AI FOR INDIGENOUS ADVOCACY**

With the introduction of artificial intelligence, we have begun integrating AI into our existing IPLP digital databases. The objective is to develop an AI-powered research assistant designed to support Indigenous advocates. This AI assistant will help in drafting complaint letters regarding human rights violations and provide tailored documents such as country reports, legislative comments, annual thematic reports, and media articles based on the user's specific needs.

For instance, using the IPLP AI Research Assistant, an Indigenous advocate in Guatemala who has been denied a community radio license by the government could easily access all relevant documents from the UNSRRIP. This includes reports and recommendations concerning the rights of Indigenous Peoples to media, specifically highlighting actions the UNSRRIP has recommended to the Guatemalan government to uphold and prioritize Indigenous rights to operate a radio channel. This tool aims to make it easier for Indigenous Peoples to advocate for their rights effectively by providing them with targeted information and resources.

The popular AI platforms like OpenAI's ChatGPT aren't capable of directly accessing all databases, such as those in the United Nations document library. Typically, AI bots do not have the ability to crawl websites; instead, they simulate an internet search and generate responses based on that search results, which can lead to inaccuracies and errors. Therefore, to develop our targeted IPLP AI Research Assistant robot, it's essential to establish a new AI workspace. This workspace would utilize a model like ChatGPT but would be specifically trained on a custom database to ensure accurate responses.

Creating such a tailored AI assistant involves technical challenges, primarily due to limitations imposed by third-party AI building service providers. Most of these platforms restrict the amount of data that can be integrated into the bot, with limits typically around 500,000 words or up to 150 files in formats like PDF, DOCX, HTML or XLS per source. These constraints necessitate careful selection and prioritization of the data to be included to maximize the effectiveness and accuracy of the AI research assistant in addressing the needs of Indigenous advocates.

## **III. THE INDIGIAI EXPERIMENT**

The "IndigiAI" experiment illustrates the operational basis of AI chat agents, which include training instructions, user input, and the database. I boarded on this project by acquiring an AI bot, naming it "IndigiAI" and powering it with ChatGPT. Initially, I did not populate its database; instead, I tested its basic capabilities by submitting a question (Query): "UNSRRIP all country visits to Canada." Historically, the UNSRRIP has made three official country visits to Canada. I anticipated that IndigiAI would detail all three visits, including the rapporteurs' names,

the years they visited, the UN document numbers, and direct URLs to the reports. However, IndigiAI only referenced the most recent visit in 2023 by the current UNSRRIP, revealing its reliance on only the readily available internet search data. This highlighted the necessity for a custom database (Data Source).

Realizing the limitations of a minimal database, I enhanced the Data Source by uploading detailed PDFs of all three Canada visit reports to expand IndigiAI's reference material. Despite this, the responses (Query Result) remained inaccurately focused on the latest visit. This issue underscored that IndigiAI could only manipulate text directly input into its Data Source, illustrating a fundamental challenge in AI responsiveness.

To troubleshoot the error of inaccuracy, I compiled all relevant UNSRRIP visit data into an Excel sheet, listing names, years, countries, UN document numbers, and URLs. Unfortunately, IndigiAI struggled with processing this structured data, resulting in random and inaccurate Query Results. In a final attempt to refine IndigiAI's utility, I transformed the Excel data into a narrative format within a Word document (Training). For example,

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### Country Visits by Special Rapporteurs

This document is structured to aid in AI training and data retrieval for IndigiAI. Below is a comprehensive account of visits by Special Rapporteurs to various countries.

Each country's data is presented consistently to ensure better parsing by AI systems. Country names are highlighted, and sections are clearly delineated.

### Summary of Visits to Canada

Special Rapporteurs have visited Canada on multiple occasions. Detailed accounts of these visits are provided below: In 2023, Jose Francisco Cali Tzay visited Canada. In 2014, S. James Anaya visited Canada for Addendum - The situation of Indigenous Peoples in Canada. In 2004, Rodolfo Stavenhagen visited Canada.

Year	Country Visited	Special Rapporteur	Themes	UN Document Number	Direct Link
2023	Canada	Jose Francisco Cali Tzay	Country visit to Canada	A/HRC/54/31/Add.2	<a href="https://www.ohchr.org/en/documents/country-reports/ahrc5431add2-visit-canada-report-special-rapporteur-rights-indigenous">https://www.ohchr.org/en/documents/country-reports/ahrc5431add2-visit-canada-report-special-rapporteur-rights-indigenous</a>
2014	Canada	S. James Anaya	Addendum - The situation of indigenous peoples in Canada	A/HRC/27/52/Add.2	<a href="https://undocs.org/A/HRC/27/52/Add.2">https://undocs.org/A/HRC/27/52/Add.2</a>
2004	Canada	Rodolfo Stavenhagen	Country visit to Canada	E/CN.4/2005/88/Add.3	<a href="https://undocs.org/E/CN.4/2005/88/Add.3">https://undocs.org/E/CN.4/2005/88/Add.3</a>

And so on...

Following initial tests, I configured IndigiAI to prioritize information from the Training document and then supplemented it with data from the Data Source during interactions. Consequently, if a user issues a Query such as “UNSRIP total visits to Canada,” IndigiAI is now programmed to provide a comprehensive Query Result. This result includes a list of all visits, complete with UN document numbers, the names of the rapporteurs, the years of the visits, and direct links to the full reports. If a user asks for more details with a Query like “tell me more about the UNSRRIP Canada visit in 2004,” IndigiAI will use the Data Source to summarize the specifics of the 2004 visit.

Currently, our focus extends beyond just the country visits; we are actively developing a comprehensive Data Source that encompasses all UNSRRIP activities. This expansion aims to enhance the bot’s utility, so when a user inquires about “UNSRIP all activities regarding the Mayan Cakchiquel from Guatemala,” IndigiAI will be able to deliver precise and relevant Query Results by effectively utilizing both the Training and the Data Source.

The key challenge now is to seamlessly integrate multiple Data Sources and refine IndigiAI’s ability to navigate them efficiently. This will ensure that regardless of the user’s Query, the IndigiAI can access and synthesize the relevant information to provide accurate and useful Query Results to Indigenous communities free of charge!

## AI AND HUMAN RIGHTS

The AI industry is experiencing intense competition, with recent developments such as Google's launch of Gemini 1.5. This new version can manage vast databases, allowing users to upload lengthy videos and inquire about details like text on a piece of paper in a scene. Amidst these technological advancements, Volker Türk, the UN High Commissioner on Human Rights, addressed the 53rd Session of the Human Rights Council, calling for urgent AI regulations that uphold human rights.<sup>5</sup> Türk emphasized that effective regulation should both mitigate risks and prioritize human welfare, critiquing the current risk-based regulatory approach that depends too much on AI developers’ self-regulation. He argued this method lacks sufficient safeguards and fails to hold developers accountable, advocating instead for a human rights-focused regulatory framework across all stages of AI development—from data collection to deployment—to avoid potential abuses like increased surveillance and discrimination.

The competition in the tech industry to offer the best services could lead to data breaches, putting private information at risk, including that of Indigenous communities. As companies try to outperform each other, they might not focus enough on strong security measures, which could expose vulnerable groups to privacy issues. Additionally, I am concerned that AI systems are being programmed to conceal historical injustices against Indigenous Peoples, which I refer to as “Colonial Bots.” Therefore, it's essential for Indigenous Peoples to either develop and train their

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<sup>5</sup> Volker Türk, UN High Commissioner for Human Rights, Statement at High Level Side Event of the 53rd Session of the Human Rights Council, (Jul. 12, 2023), <https://www.ohchr.org/en/statements/2023/07/artificial-intelligence-must-be-grounded-human-rights-says-high-commissioner>.

own AI systems or be actively involved in shaping AI regulations set by governments.<sup>6</sup> This involvement can help ensure that Indigenous Peoples' rights and histories are properly represented and protected.

Colonial bots are programmed to be soft-spoken, prioritizing smooth and unobjectionable conversations over factual accuracy. These bots avoid confronting or contradicting sovereign governments, even when factual discrepancies are evident. I am concerned that, in the future, governments might regulate AI to either withhold information about historical injustices against Indigenous Peoples or manipulate the portrayal of history to omit such wrongdoings from databases altogether.

In the forthcoming era, I anticipate the introduction of nationwide Large Language Models regulated by governments. These models will be designed to serve citizens through a centralized database, similar to how governments currently use websites, and will include legislative policies, jurisprudence, legal documents, administrative procedures, and public resources. The active participation of Indigenous Peoples in shaping these AI systems will be invaluable, ensuring that their perspectives and needs are properly represented.

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<sup>6</sup> Human Rights Watch, *US: Congress must regulate artificial intelligence to protect rights* (Oct 17, 2023), <https://www.hrw.org/news/2023/10/17/us-congress-must-regulate-artificial-intelligence-protect-rights>.