

Conference: Building Scientific and Collaborative Capacity for AI in Indigenous Language Research

Overview

We propose an interdisciplinary workshop to define responsible and collaborative practices for applying artificial intelligence (AI) to endangered language research and revitalization. Interest in this space is growing rapidly, but efforts often proceed without coordination between technical researchers and those with deep experience in language documentation. This is a critical moment: early design decisions risk shaping long-term norms in ways that may be difficult to reverse, especially in low-resource settings where even minor inaccuracies can propagate quickly. At the same time, the field of language documentation offers decades of practical models for sustainable, partnership-driven research that can inform more thoughtful AI development. This workshop will bring together language teachers, linguists, archivists, and AI researchers to surface shared challenges, highlight promising approaches, and develop guidance for effective, scientifically grounded collaboration. Outputs will include a position paper, practical recommendations for researchers and funders, and the formation of an interdisciplinary working group to support continued dialogue and future project development.

Intellectual Merit

This workshop will help lay the scientific groundwork for rigorous research at the intersection of artificial intelligence and endangered language technologies. Extremely low-resource language settings present a range of challenges (such as data scarcity, grammar/morphological complexity, and limited evaluation resources) that remain under-explored in current AI research. These challenges also offer significant opportunities to advance AI methodologies that are adaptable, robust, and effective in resource-constrained conditions. Progress in this area depends not only on technical innovation, but also on cross-disciplinary collaboration and a clear understanding of how language technologies interact with community revitalization goals. By bringing together AI researchers, linguists, and practitioners, the workshop will help align scientific inquiry with the practical needs and constraints of endangered language contexts. The resulting insights will support the emergence of new research directions and provide early guidance for a growing field. In doing so, this convening will contribute to foundational advances in AI while supporting careful, context-sensitive applications in an area of high scientific potential.

Broader Impacts

The workshop will help shape collaborative research practices that are both scientifically productive and responsive to the needs of underserved language communities. By creating space for knowledge-sharing between documentation experts, language practitioners, and AI researchers, the event will support long-term interdisciplinary partnerships and help reduce barriers that currently limit engagement in this area. The participant group will include individuals from a range of regions, institutions, and professional backgrounds, with attention to career stage and access to resources. The outputs of the workshop, including recommendations, shared guidance, and a sustained network of collaborators, will serve as long-term resources for researchers and institutions seeking to contribute to this domain in a thoughtful and scientifically informed way.