Work in Progress: Exclusive Rhetoric in AI Conference Mission Statements

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Abstract

AI conferences are pivotal spaces for knowledge exchange, collaboration, and shaping the trajectory of research, practice, and education. This paper presents preliminary findings from an analysis of AI conference mission statements, investigating how their stated goals affect who is welcomed into AI conversations. We find that many mission statements reflect assumptions that may narrow participation and reinforce disciplinary and institutional silos. This limits engagement from a broad range of contributors, including working professionals, educators, students, and people with systemic or personal restrictions. By broadening participation and intentionally fostering cross-sector and interdisciplinary connections, AI conferences can help unlock more innovation. We advocate for clearer framing that supports the demystification of AI and a wider understanding of its implications to society. This can increase fit-to-purpose for conference attendees and improve on the projects and collaborations that may arise from attending a conference that's well suited to their context.

1 Introduction

Artificial intelligence (AI) conferences are central to the advancement and institutionalization of the field. Drawing on Lo Verso's framework of discursive field formation (1), these events serve as critical interfaces where collaboration between regulators, researchers, entrepreneurs, and civil society not only advances technological innovation and market fit, but also informs adaptive regulatory practices and creates opportunities for research collaborations. Lampel and Meyer (2) describe such conferences as "field-configuring events" that bring together diverse actors across professional, organizational, and geographical boundaries, within temporally bounded settings. These events foster both structured and informal interactions, facilitate knowledge exchange and collective sense-making, and contribute to

the production of enduring social and reputational capital.

Recent work by Larsen (3) further underscores that these field-level interactions are instrumental in shaping responsive governance frameworks and mitigating the harms and risks of AI systems. While the mission statements of major AI conferences emphasize research dissemination, technology demonstration, and cross-sector collaboration, emerging critiques (4; 5) point to persistent information asymmetries and silos. These gaps raise questions about who gets to participate in shaping the field, and highlight the need for broader engagement to ensure that AI development reflects broad range of priorities.

This current stage in our work in progress focuses on the researcher-coded textual analysis of AI conference mission statements, combined with computational analysis using large language models (LLMs). LLMs are employed to efficiently process and synthesize large volumes of text of the mission statements, allowing for the identification of underlying themes, even gaps and inconsistencies in how conferences articulate commitments to democratizing emerging technology. By leveraging the capabilities of LLMs, this work aims to move beyond anecdotal critiques toward a more empirical understanding of how democratizing AI is defined and how it is, or is not, embedded in the foundational narratives of AI conferences. Such analysis is crucial for proposing data-driven frameworks that can guide the design of field-configuring events, ensuring that the future of AI development benefits from participation from all.

2 The Importance of Mission Statements

There is a global call to ensure that AI tools, knowledge, and opportunities are accessible not only to researchers and technologists in domain, but also, more broadly to educators, working professionals, and all of society. As AI increasingly impacts every facet of society, it is essential that its development not be confined to isolated technical communities (6; 7). Democratizing AI involves demystifying its concepts, broadening participation across sectors, and fostering environments where interdisciplinary and public contributions are recognized as vital to progress. Despite the central role AI conferences play in shaping the field, limited attention has been paid to how these events position themselves through their mission statements. Mission statements offer critical insight into an organization's priorities, values, and assumptions about its intended audience (8; 9; 10). Analyzing this language for AI conferences provides insight on how that gathering may reinforce or challenge disciplinary silos, and whether they create space for non-traditional contributors.

This paper proposes that examining AI conference mission statements is essential for understanding the evolving boundaries of the field. Our analysis can support and extend prior research (4; 5; 11) by identifying persistent overemphasis or underemphasis on technical aspects, the marginalization of non-technical or cross-disciplinary engagement, and the lack of coherent or clearly communicated objectives. These issues can lead to misaligned expectations and limit a conference's broader societal impact.

By surfacing patterns, the larger research can inform more deliberate strategic planning, helping conference organizers design events that promote interdisciplinary dialogue, engage broader communities, and stay relevant in a rapidly changing AI landscape. In doing so, conferences can evolve into more open, responsive, and integrative spaces, which is essential for fostering innovation, by ensuring that AI development reflects the interests and insights of a wider public.

3 work-in-progress Methods

To better understand the priorities, values, and thematic emphases within the AI community, the research team collected mission statements from over 100 prominent AI conferences. These mission statements were obtained by researchers copying in the statements from official conference websites, working from Summer 2024 through Spring 2025. This dataset includes both short-form and long-form mission statements, where short-form statements are typically succinct taglines or one-sentence summaries, while long-form statements are more elaborate descriptions outlining the conference's objectives, scope, and guiding principles.

Many AI conferences don't have explicit mission statements. Where that is the case, tag lines or other slogans were sought and classified as mission statements when found, for example longer descriptions on their website or social media pages. Multiple researchers conducted multiple searches during the time frame of the study. Scope saturation, which is to say no new entries, was determined when new searches produced a near 100% overlap with existing listings. The new entries that do surface with new searches are either newly announced conferences or existing conferences with new mission statements. A preliminary manual qualitative thematic analysis (4) as per the Crewswell methodology for thematic analysis, indicated that statements tend to have similar language around tech, innovation, market logics, and power, and a lack of rhetoric on broader participation (12).

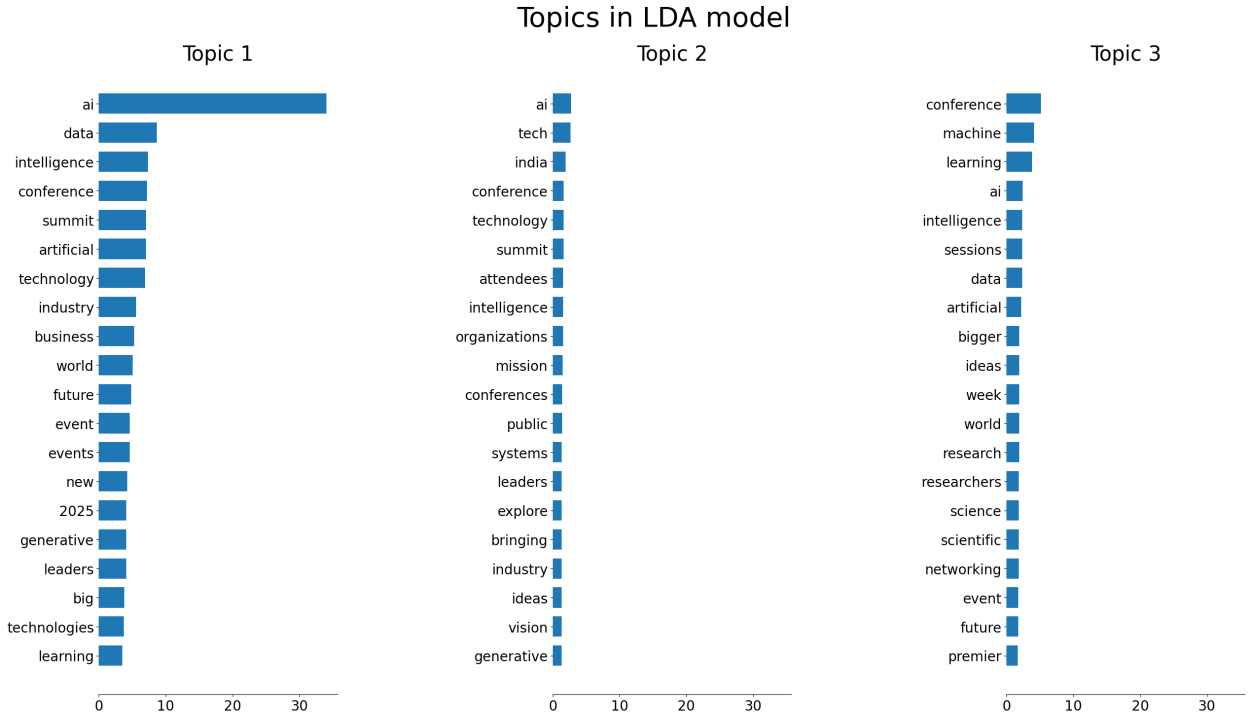

Figure 1: Topics extracted with LDA without preprocessing.

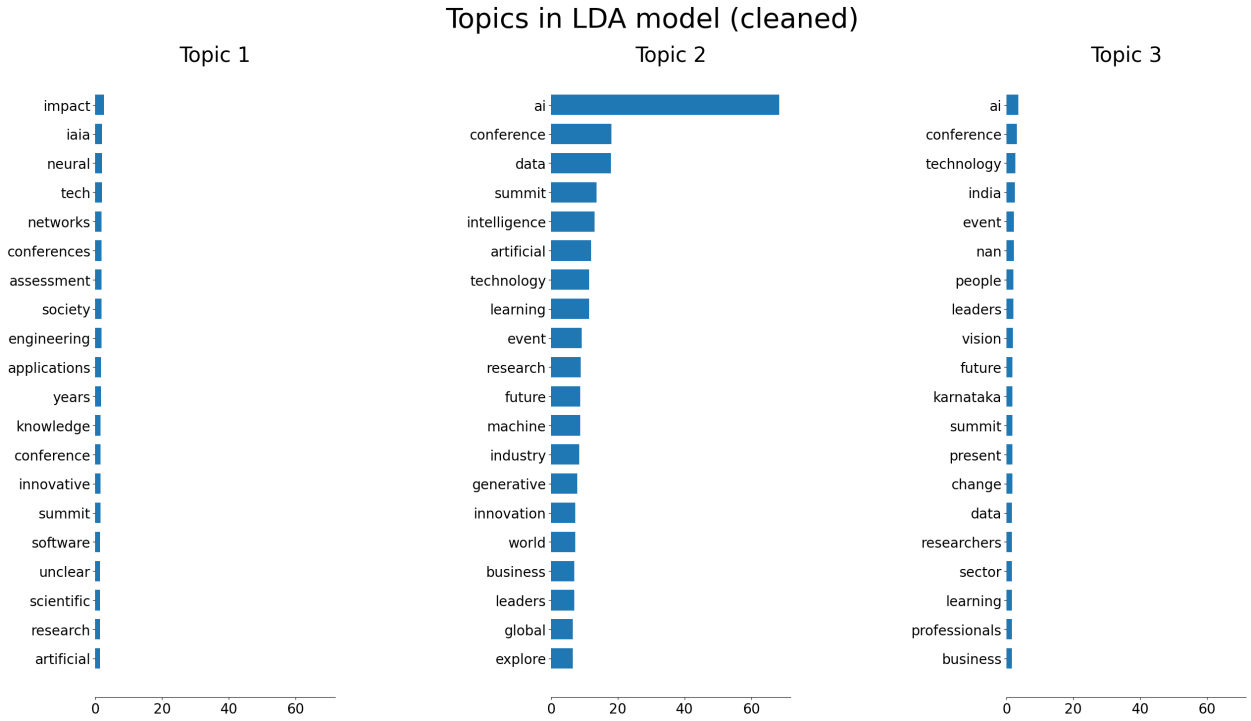

Figure 2: Topics extracted with LDA with preprocessing.

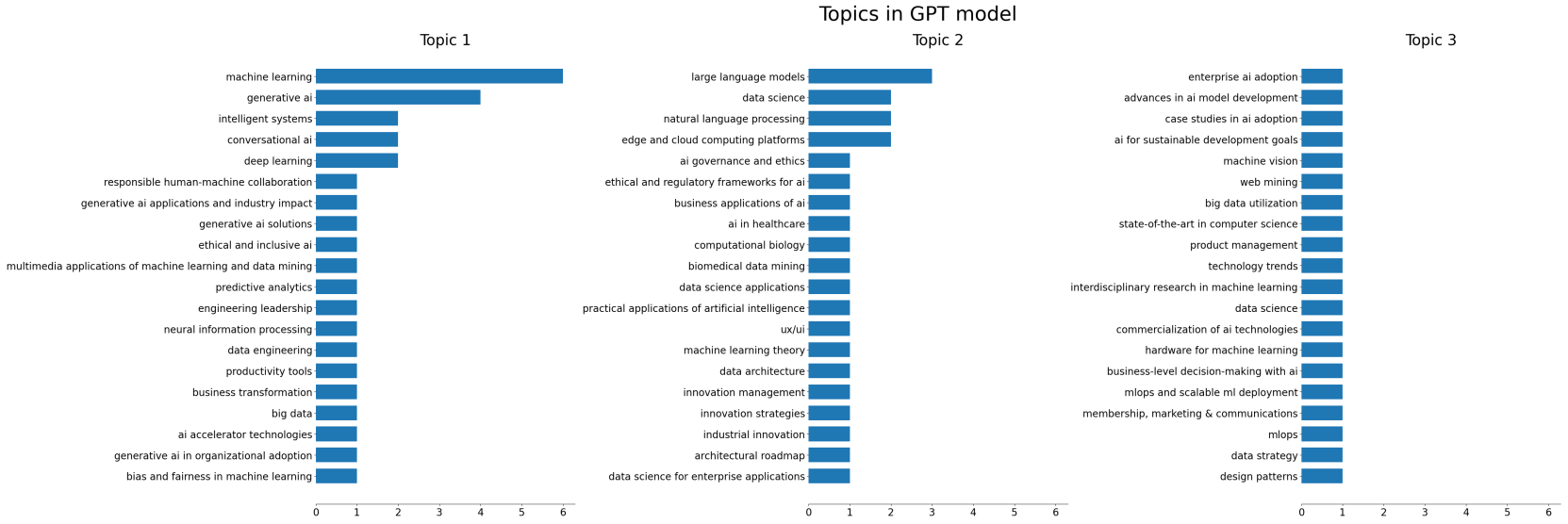

Figure 3: Topics extracted by GPT 4.1 by providing only mission statements

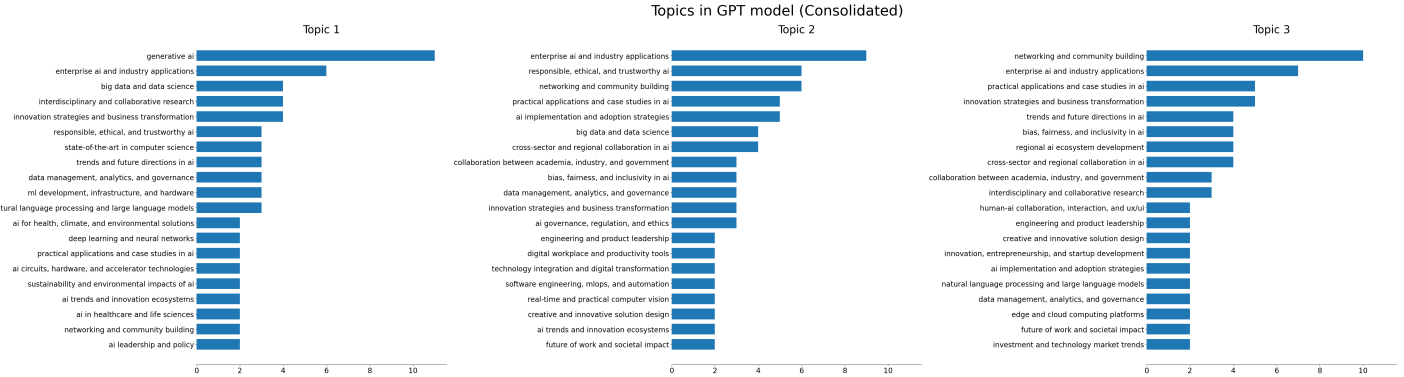

Figure 4: Topics extracted by GPT 4.1 by providing both mission statements and a set of topics

3.1 Topic Modeling

Once the mission statements were collected we performed topic modeling using two techniques - Latent Dirichlet Allocation (LDA) and by prompting a large language model (LLM) to extract topics from the mission statement.

3.1.1 Latent Dirichlet Allocation

Latent Dirichlet Allocation (LDA) is a generative probabilistic model for uncovering latent topics within a corpus of document (13).

The mission statements' corpus was preprocessed in the following way:

- Removal of stopwords
- Removal of punctuation
- Lowercasing of the text body

Subsequently, the corpus is vectorized with TF-IDF before LDA is used to extract three components. The top 10 words per component are presented in Fig. 2 For comparison, LDA was also executed without preprocessing the text to identify what topics were identified. These topics are seen in 1.

3.1.2 Large Language Models for Thematic Analysis

A Large Language Model (GPT-4.1) was also leveraged to identify the topics present in the mission statements (e.g., (14; 15)). The model was asked to identify three topics in decreasing order of pertinence for each mission statement (Fig. 3).

As a secondary analysis, the list of topics identified was grouped and consolidated by giving the LLM the list of unique topics generated in the prior step and asking it to group similar topics. The LLM was then given the mission statements again and asked to assign topics only from the consolidated set (Fig. 4).

The prompts below were first used to extract topics from a given short and long mission statement tuple (if only either the short or the long mission statement exists, the other is left blank i.e. represented with the empty string "") A next prompt was used to aggregate topics extracted in step 1 in order to group topics with similar semantic meanings and variations on phrasing in order to generate a consolidated set of topics to be used for the next stage of analysis. With the topics grouped into a consolidated set, a prompt similar to Prompt 1 was then leveraged to generate up to three topics for each mission statement pairs.

- **Prompt 1 – Extract Topics from a Mission Statement**

Prompt 1: Topic Extraction

Given a pair of mission statements (short and long) of various AI conferences, extract and provide up to 3 topics. Avoid extracting generic topics or broad umbrella terms. Be as specific as possible when extracting the topics.
Short mission statement: `"{mission_short}"`
Long mission statement: `"{mission_long}"`

- **Prompt 2 – Grouping Similar Topics**

Prompt 2: Topic Consolidation

Given a list of extracted topics from a corpus, can you consolidate similar topics and return the minimum number of topics such that they can be standalone? For instance, group topics such as `"Machine Learning"` and `"machine learning"`. Also group topics with similar meaning like `"SOTA in CS"` and `"State of the art in computer science"`, or `"AI Leadership in Canada"` and `"AI Leadership"`.

Prompt 2: Topic Consolidation

A subset of the initial set of predicted topics is shown below:

- `State-of-the-Art in Computer Science`
- `Edge and cloud computing platforms`
- `Global technology integration`
- `AI leadership in Canada`
- `Engineering Leadership`
- `Marketing leadership in AI adoption`
- `Generative AI`
- `Machine Vision`
- `Real-time computer vision`
- `Computer vision`

- **Prompt 3 – - Assigning Topics to Mission Statements Using Consolidated Topic List**

Prompt 2: Topic Consolidation

Given a pair of mission statements (short and long) of various AI conferences, extract and provide up to 3 topics. Avoid extracting generic topics or broad umbrella terms. Be as specific as possible when extracting the topics. The topics you extract must come from the following list of allowed topics: List of Allowed Topics: 'State-of-the-Art in Computer Science','Edge and Cloud Computing Platforms', 'Technology Integration and Digital Transformation','Localized and Contextual Intelligent Systems','Trends and Future Directions in AI','AI Leadership and Policy', 'Engineering and Product Leadership'. $Shortmissionstatement$: "$mission - short$"Long mission statement: "missionlong"‘

4 Preliminary Results

As can be seen from the topics identified by LDA (Fig 1 and Fig 2) the topics identified are generally just the unigrams present in the text themselves. Words like 'AI' and 'conference' are seen with high frequency across the topic components. The LLM extracted topics are much more comprehensive and thematic and conceptually represent themes that can be found across conferences. Figures 3, 4 themselves have minor differences. The topics extracted just from the mission statements include phrases such as 'machine learning', 'data science', 'large language models' and 'natural language processing', representing topics or domains in AI and Machine Learning that conferences tend to focus on. Although a lot of those topics are predicted just once for the entire corpus.

The large language model (LLM)-based topic extraction (Figures 3 and 4) reveals slightly more nuanced topics. Instead of isolated keywords, the LLM identifies meaningful topical clusters such as "generative AI," "enterprise AI and industry applications," "interdisciplinary and collaborative research," and "responsible, ethical, and trustworthy AI." Furthermore, while the topics in Figure 3—generated using only the mission statements—primarily highlight domain-centric terms (e.g., machine learning, data science, large language models), these appear sparsely and with limited distribution across the corpus. This suggests that while some conferences emphasize specific technical areas, many mission statements remain vague or generalized in their focus. Although, more human-in-the-loop deep dives will be necessitated to understand the specific significance of these thematic trends.

5 Looking Ahead

This exploratory study of AI conference mission statements and their role in shaping participation and influence in the field is subject to several important limitations that inform future research directions. First, the analysis primarily focuses on English-language conferences, introducing a language and cultural bias that certainly excludes valuable insights from non-English-speaking conferences. Cultural nuances, local priorities, and region-specific interpretations of AI are not fully represented in the current dataset.

Second, the AI landscape is evolving rapidly, and conference themes, language, and focus areas shift significantly from year to year. This dynamism presents challenges in discerning trends and evaluating the sustained impact of mission statements over time. Third, there are new conferences launched regularly. As a result, some influential or emerging conferences

may not yet be represented, and our findings should be interpreted within that constraint.

A fourth consideration is the growing use of AI-generated content on conference websites, including potential use in crafting mission statements, speaker bios, or program summaries. This could mean that future research becomes subject to growing concerns on the limitations of using synthesized data. If conference organizers are transparent about such use, it may provide a valuable opportunity to explore how generative AI tools influence the tone, structure, and inclusivity of conference materials. This could, in turn, raise new questions about authorship, intent, semantic or realistic meaning, and perceived credibility in the framing of AI events.

Looking forward, we will correlate the researcher-coded themes from the prior study with LLM and LDA findings, to triangulate and identify potential fail modes of this automated process. A preliminary comparison identifies similar themes, for example the lack of broader participation related terms and the presence of power-related rhetoric. We furthermore plan to significantly expand our dataset with longitudinal data such as panel topics, speaker rosters, and thematic focus areas from the past decade, to allow us to better understand how influence manifests across the field and how specific mission statement elements correlate with participation, visibility, and perceived relevance or other factors of influence. This deeper analysis may help educators, organizers, and policymakers identify effective strategies for broadening engagement, encouraging interdisciplinary collaboration, and aligning conference goals with the broader imperative of democratizing AI development. It can also inform an analysis of time-bound institutionalization processes in the field of AI.

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