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**Towards A Diverse, Inclusive, Accessible and Equitable  
AAAI International Conference on Web and Social Media (ICWSM)**

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**Abstract**

The AAAI International Conference on Web and Social Media (ICWSM) is the premier interdisciplinary conference for computational and social scientific research about social media and the interactive Internet. Each year, the conference brings together hundreds of scholars from across the globe to share papers, posters, demonstrations, workshops, and tutorials that advance state-of-the-art theories and methods for understanding human behavior online. ICWSM, like all academic conferences, is a fundamentally human experience, rich with opportunity and also vulnerable to the oversights and biases that prevent some from feeling fully included in our community. This report is part of a broader effort to identify our oversights and biases and make them explicit so that, together as an intellectual community, we can work to eliminate them. ICWSM has always been committed to diversity, equity, inclusion, and accessibility, but this year, we took the opportunity to pause and critically reflect on our efforts thus far. In this report, we present a summary of these reflections. Specifically, we discuss aggregated information on paper authors over the last 14 years, we reflect on conference attendees (e.g., location and other demographics), we detail the DEI actions implemented in ICWSM 2021. These include scholarships for underrepresented groups, registration subsidies for underrepresented regions, international special panels to discuss key DEI topics, the appointment of DEI chairs to the Organizing Committee, and the creation of a new award for distinguished young researchers. Finally, we present a plan for the future with high-priority projects for ICWSM 2022 and beyond.

**1. Introduction**

The AAAI International Conference on Web and Social Media (ICWSM) is the premier interdisciplinary conference for computational and social scientific research about social media and the interactive Internet. Each year, the conference brings together hundreds of scholars from across the globe to share papers, posters, demonstrations, workshops, and tutorials that advance state-of-the-art theories and methods for understanding human behavior online. At the same time, we invite scholars to reconnect with old friends and collaborators and build new connections with one another. ICWSM, like all academic conferences, is a fundamentally human experience, rich with opportunity and also vulnerable to the oversights and biases that prevent some from feeling fully included in our community.

This report is part of a broader effort to identify our oversights and biases and make them explicit so that, together as an intellectual community, we can work to eliminate them. ICWSM has always been committed to diversity, equity, inclusion, and accessibility, however that commitment took a more urgent and active form in 2020. ICWSM 2020 was held virtually during the height of the COVID-19 pandemic and widespread racial justice protests in response to the murders of George Floyd, Ahmaud Arbery, Breonna Taylor, and many other Black and brown people in the United States. The organizers created synchronous and

asynchronous spaces to discuss anti-racist ideas for ICWSM; conversations that naturally evolved to include anti-bias ideas of many kinds. Those ideas included convening a Diversity, Equity, and Inclusion (DEI) Council, transparently documenting DEI efforts, and tracking improvements year over year. This report is a step towards serving those goals.

### **1.1 The Council**

ICWSM DEI Council consists of the DEI Council Chair, Diversity, Equity and Inclusion Chair(s), Global Equity Chair(s), Accessibility Chair(s), and the conference General Chair, with support from the Organizing and Steering Committees. The DEI Council is assembled annually by the General Chair and DEI Council Chair through an open call for nominations, with an eye on assembling a diverse committee. Committee members serve one-year terms and are eligible for reappointment in subsequent years. The General Chair is appointed annually by the ICWSM Steering and the DEI Council chair is appointed every two years by the ICWSM Steering Committee. While the General Chair becomes a member of the Steering Committee after their term, the DEI Chair sits on the Steering Committee for the duration of their position.

## **2. Diversity, Equity and Inclusion at ICWSM**

### **2.1 Introduction**

Diversity is vital to any organization's success. We apply the framework offered by D'Ignazio and Klein<sup>1</sup> (2020, pp. 18) in thinking about diversity as a continuum invoking *content*, *form*, and *process*. A conference that is diverse in content would be more inclusive in terms of subject matter, e.g., by reporting on data from diverse contexts. Diversity in form would offer diverse perspectives in how computational social science is communicated, and which issues are raised to the forefront. Finally, diversity in processes would involve the building of "participatory, inclusive processes of knowledge production"<sup>2</sup> (D'Ignazio & Klein, 2020 pp. 18), e.g., by involving people from diverse backgrounds in the organization and steering committees of the conference. At ICWSM, we approach diversity by focusing on creating an environment that is inclusive and welcoming of individuals with a wide range of backgrounds, characteristics, and experiences. This includes demographic diversity, such as race, ethnicity, gender, age, and sexual orientation, as well as geographic diversity, diversity in ability, disciplinary diversity, and diversity in organizational roles. This information has not been regularly collected about ICWSM participants, authors, or organizing committee members. As a first step, to address diversity considerations in content and form, we reviewed the past 14 years of author data to establish a rough baseline signal of diversity ICWSM. Below we present this information and also some initial statistics from ICWSM 2021.

### **2.2 ICWSM Authors**

Using a dataset of 14 years of published papers at ICWSM, we manually identified the gender, sector, discipline, and geographic region of the authors. Assessments were based on authors' public profiles (social media, websites, etc.) as well as meta-data from the papers. These identifications are imperfect and incomplete (notably, we did not attempt to identify authors' race). Moving forward, we strongly recommend inviting authors to self-identify gender, race, and other demographic identity information for more accurate analyses.

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<sup>1</sup> D'Ignazio, C., & Klein, L. F. (2020). *Data feminism*. Cambridge, MA: MIT Press.

<sup>2</sup> *ibid*, pp. 18

Our analyses revealed several growth areas for ICWSM. Among others, women and non-binary authors are underrepresented as ICWSM authors. In the last 14 years, approximately three-quarters of ICWSM papers were first-authored by men, one-quarter by women, and fewer than 1% by non-binary people.

Authors from the Global South are also underrepresented at ICWSM. The majority of participants who have published at ICWSM are from the United States and Europe. In the last 14 years, approximately 60% of ICWSM papers were published by authors from North America, followed by Europe (~25%), Asia (~12%), South America (~2%) and Oceania (~1%). No papers by authors based in Africa have been published at ICWSM. These figures fluctuate year to year, but the general pattern is remarkably consistent: ICWSM papers are disproportionately authored by researchers from North America, with some representation from Europe, and a very small number of authors based in South America, Oceania, or Africa.

Unsurprisingly, most papers published at ICWSM are written by academics (as defined by institutions). In the last 14 years, more than 85% of papers were written by academic authors, with the majority of remaining papers authored by people working for technology companies and occasionally government or non-governmental organizations

Among authors, Computer Science is the most commonly represented discipline (75%+), followed by disciplines in the Social Sciences (~10%), and rarely disciplines in the Arts, Humanities, Cognitive Science, and/or Engineering. This is inconsistent with the target areas identified by ICWSM and in calls for papers; published authors hail from a more limited set of disciplines than we aim to engage.

### **2.3 ICWSM Registrants**

We also analyzed basic geographic data from participants who registered for the conference over the last three years. At ICWSM 2018, held in Stanford, California, USA, there were 328 participants from 25 countries. Among these, 72 participants were workshop/tutorial only and 256 (163 regular, 93 student) main conference participants. In 2019, when the conference was held in Munich, Germany, there were 251 participants from 32 different countries. 2019 had 30 workshop/tutorial only registrants and 211 (142 regular, 69 student) registrants at the main conference. The virtual conference in 2020 attracted 341 participants representing 119 institutions, from 25 countries. This conference had 114 workshop/tutorial only participants and 228 (120 regular, 108 student) main conference participants. Finally, the 2021 conference had 473 participants from 36 countries and across 6 continents. These included 134 workshop/tutorial only registrants and 339 (172 regular, 167 students) main conference registrants. ICWSM 2021 was able to engage with persons in countries that do not typically attend (or attend in small numbers) the event including Colombia, Chile, Ghana, Israel, Japan, Kenya, Namibia, Nigeria, Philippines and Sri Lanka. This year, there were 277 first time attendees (~63% of all registrations), which may hint to the value that virtual events bring to expanding the ICWSM community.

## **3. Global Access and Accessibility at ICWSM**

### **3.1 Introduction**

Accessibility seeks to ensure that all individuals, regardless of physical, mental, or technical limitations, can engage with ICWSM systems, devices, and events. Accessibility has always been a priority of ICWSM and particularly, at our annual conferences. All of the first 13 ICWSM conferences through 2019 were held in facilities that provided physical accessibility

accommodations for those with limited mobility. Additional accommodation to address audio, visual, or motor accessibility needs were also made on an ad-hoc basis as requested. These requests and accommodations have not been well tracked or documented. Moving forward, tracking requests and the respective actions taken would allow for the organizing/steering committees to better anticipate the needs of the community and plan such that future requests are proactively addressed.

### **3.2 ICWSM 2020**

In 2020, the COVID-19 pandemic necessitated a rapid shift from the planned in-person ICWSM to an online conference. Transitioning online presented numerous technology access issues, including differential software access and Internet speeds around the globe, different skill and experience with streaming media, and difficulty managing time-zone requirements for authors who had expected to travel and present in-person. On balance, however, being virtual significantly reduced physical or financial barriers to attendance and made the conference relatively more accessible to people around the globe. Conference participation went up and participants were able to access many different interaction modes, including a fully functional website, recorded talks, synchronous Zoom sessions, and threaded conversations on Slack. This combination of technologies created an environment where participants could pick and choose experiences that met their needs, all while avoiding the complications of international travel.

### **3.3 ICWSM 2021**

Due to the uncertainty of the COVID-19 pandemic and vaccine rollouts, ICWSM 2021 was initially planned as a hybrid event with a virtual component and a potential physical component in Atlanta, Georgia, USA. Ultimately the conference was held entirely virtually, with support from Virtual Conference chairs and the benefit of a full year to plan the virtual experience. We took this opportunity to make our conference more accessible along a number of dimensions. Below, we provide a list of specific steps that we implemented to increase the accessibility of the conference.

#### **3.3.1 Conference Software**

Six months before the event, we circulated a survey among present and past authors about their preferences for a virtual conference experience. We also contacted other communities who do not typically attend ICWSM (e.g., networks in Africa and South America) to understand their preferences and needs for the conference. We collected information about access, such as the quality of their internet connection, comfort with online conference tools, and preferences about time zones and synchronous attendance. Past attendees had three main concerns about a virtual conference. First, they wanted the conference to be held during their working hours, and they wanted sufficient advance notice about the schedule to plan their work around the main events. Second, they wanted to use the technologies they were familiar with (e.g., Slack and Zoom featured highly). Third, they wanted a virtual environment for interactive and social sessions to simulate how attendees usually mingle at a conference. Based on the feedback received, the virtual conference experience was crafted around the concepts of accessibility and convenience.

To address timing concerns, all talks held during the day were available either on-demand or on-schedule at a 12-hour lag, so that participants could choose to attend at a time that was best suited to them. To address the technology concerns, we crafted two modes of

ICWSM attendance. The 'Lite' mode included a MiniConf<sup>3</sup> and Slack experience. MiniConf is a companion website to the conference, which had information about the talks (and their recordings) organized according to the schedule and topics of the conference; it also included information about keynotes, panels, workshops, tutorials and the data challenge. The MiniConf site met the Web Content Accessibility Guide<sup>4</sup>, with all web pages possessing a consistent heading and document structure (which allows assistive technologies to use them to provide in-page navigation) and appropriate alt-text has been provided for images used. Additionally, the content was organized to be distinguishable by using high contrast between the text and the background, not relying on colors only to convey information, and adding text resize features that can be used without loss of functionality. Next, the website is designed to be keyboard accessible for keyboard-only users. Slack complemented the ICWSM MiniConf site by providing a way for people to interact with other attendees (synchronously or asynchronously) and to ask/answer questions posted about research presented at the event.

To address co-present mingling requests, the immersive 'Deluxe' conference experience afforded participants with a virtual physical space to explore papers in small-group virtual galleries during the conference and to engage with paper authors in Q&A sessions in scheduled time slots. This experience was held on Gather.town<sup>5</sup>. It also included pre-scheduled social and sponsor events over the three days of the conference. This deluxe conference experience relied heavily on the capabilities of Gather.town. While this was a great platform to simulate conference engagement, we also recognize the poor accessibility of Gather.town puts an unfair burden on people with disabilities, especially blind, low vision, deaf, and hard of hearing participants. To address some of these concerns, the organizing team invested heavily in efforts to layout the virtual space to make the space as easy to navigate as possible for low vision or mobility challenged participants within the constraints of the technology. Help desks, help features, and student volunteers were also included in (and to monitor) the space to support individuals who had any issues with access. The ICWSM 2021 Gather.town space can be seen in Figure 1.



**Figure 1.** ICWSM 2021 Gather.town space.

<sup>3</sup> <http://www.mini-conf.org/>

<sup>4</sup> <https://www.w3.org/WAI/standards-guidelines/wcag/>

<sup>5</sup> <https://gather.town/>

### **3.3.2 Registration**

To improve upon prior years' efforts to support those with accessibility requirements, at ICWSM 2021 we sought to ask attendees about their needs at registration. Specifically, the registration page of the conference requested that participants indicate any accessibility requirements (such as requesting sign language interpretation, CART caption services, before the close of early registration). As new requests were received, the Accessibility Chair was assigned to follow up with requests and student volunteers also identified to provide assistance (e.g., navigating the conference, assisting to ask questions to presenters) as required.

## **4. Diversity, Equity, and Inclusion at ICWSM**

In 2020, against the dual backdrop of the COVID-19 pandemic, which disproportionately affected people of color, and widespread racial justice protests, ICWSM explicitly expressed solidarity with the Black Community. It also committed to working to include more Black and marginalized people in the ICWSM community. As a first and immediate step, the conference organizers offered 20 conference fee waivers to allow Black scholars and scholars who identified as members of other marginalized groups to attend ICWSM 2020. Also, a Slack channel was created to solicit anti-racist ideas for ICWSM, and the program chairs facilitated live anti-racism discussion forums during the conference. The ideas generated included: committing to scholarships for underrepresented participants; creating more opportunities for global participation through regional hubs, offering programming at times more convenient for Asia and Oceania, social programming in non-English languages, and having a sliding conference fee for participants from World Bank Tier 2 and 3 countries; maintaining virtual and/or hybrid participation options for those who are unable to travel due to expense, visa restrictions, or other reasons; and creating identity-based networking and mentoring groups for participants from underrepresented demographic, geographic, and/or disciplinary groups; conference committed to convening a steering group to implement these ideas.

ICWSM 2021 incorporated DEI efforts throughout the organization and implementation of the conference, and partially implemented many of the ideas generated during our 2020 meeting, and also expanded them to create a welcoming, diverse and inclusive conference experience (and ideally, by extension, ICWSM community).

### **4.1 Scholarships for Underrepresented Groups Program and Region-Based Subsidies**

While ICWSM strives to be an inclusive conference, we acknowledge that currently, there are various groups underrepresented at our annual events and in our wider community. One of the primary reasons for this is financial. It is expensive to travel to the United States or Europe (ICWSM has only been hosted only in these two locations) and registration costs can be prohibitive (the last physical event hosted in Germany in 2019 had early registration costs of \$685 USD for persons not members of AAI). In 2021, we used two strategies to mitigate this challenge. First, we worked with sponsors to include a number of free registrations within all sponsor packages. Bronze and Silver sponsors automatically sponsored 5 people from underrepresented groups. Gold and Platinum sponsors automatically sponsored 10 and 15 people from underrepresented groups, respectively. Across our 9 sponsors (2 Platinum, 3

Silver and 4 Bronze), this generated 50 scholarships dedicated to participants from underrepresented groups.

Second, from our earlier analysis of the regions most underrepresented at ICWSM, it was clear that Africa and South America needed additional support to participate in our community. To lower barriers to entry at ICWSM, we worked with AAAI to provide registration fee subsidies for all participants from these two regions. It is our hope that this reduced cost, in combination with the scholarships that were offered will result in higher engagement with our international colleagues.

## **4.2 Keynotes**

Keynotes spotlight prominent scholars and researchers and have been a core part of the conference since 2007. They have inspired ICWSM, shared visions and contributed to the wider community. Reflecting on the data, we found that a vast majority of keynote speakers were based in North America (35/39) and the others were from Europe (4/39). More specifically, 35 were based in the United States, 1 in Spain, 1 in Germany and 2 in the UK. This aligns with the conference's geographic roots, but also presents the conference with a substantial opportunity to look beyond these 4 countries for future keynote speakers. At ICWSM 2021, we broadened representation with our first keynote speaker based in Brazil (South America), Virgilio Almeida speaking on Digital Governance.

## **4.3 Panel Sessions: Publishing, Women in Social Computing and Global Research**

In addition to keynote speakers, we also organized three Special Panels to focus on three different important DEI efforts:

A panel on "Publishing your Research at ICWSM" engaged newcomers to ICWSM and sought to reduce barriers to future participation and publication. The panel featured Editors-in-Chief Ceren Budak and Lexing Xie and the conference Program Chairs, Afra Mashhadi and Kenny Joseph, who answered questions from the audience on a variety of topics related to successfully publishing at ICWSM. The session was hosted by James Caverlee.

A panel on "Women in Social Computing" highlighted the excellent contributions of women researchers in our discipline. Panelists included the co-founder of the ICWSM conference, Natalie Glance, as well as several of the previous General or Program Co-Chairs of the conference, Lada Adamic, Meeyoung Cha, Munmun De Choudhury, and Sandra González-Bailón. The session was hosted by the Virtual Conference Chair, Eni Mustafaraj. Panelists reflected on the past, present, and future of research in computational social science, and highlighted various research pathways for women in our field.

Our final Special Panel, "ICWSM and the Global Research Community" focused on engaging geographic areas not historically represented at ICWSM. The panel featured a number of experts on international DEI, from all over the world. These included Anicia Peters, Francisco J. Marmolejo Cossío, Brooke Foucault Welles, and Kokil Jaidka, with the session hosted by General Chair, Jason R.C. Nurse. The goal of the panel was to critically reflect on the first 15 years of ICWSM, highlight global inequities and barriers to participation in the past, and offer suggestions for how ICWSM can facilitate more equitable global participation in the future.

In sum, these Special Panels offered dedicated time and expertise to bring the ICWSM community together around important aspects of Diversity, Equity, and Inclusion. We strongly endorse continuing the Special Panel programming in future years, rotating through topics and communities as needed to address evolving Diversity, Equity, and Inclusion priorities.



#### **4.4 Awards: Adamic-Glance Distinguished Young Researcher Award**

To celebrate the 15th anniversary of ICWSM, we created a new award titled the Adamic-Glance Distinguished Young Researcher Award. This award is named after two outstanding women researchers, Lada Adamic and Natalie Glance, who have made significant contributions to the computational social science field in general and ICWSM in particular. Together, they are the co-authors of the 2005 paper “The Political Blogosphere of the 2004 US Election: Divided They Blog”<sup>6</sup>, which is one of the most cited empirical papers in our field, with more than 3,000 citations. Glance is one of the co-founders of the ICWSM conference, serving as the first general co-chair in 2007, as a program co-chair in the two subsequent years, and on the steering committee until 2015. Lada Adamic, the only person to have been invited twice as a keynote speaker at ICWSM, has also served in various leadership roles at ICWSM from 2008-2019. Furthermore, she is the only woman co-author on the field-defining 2009 Science article that announced the establishment of the discipline of Computational Social Science.<sup>7</sup> (The article’s extensive co-author list includes 14 men and one woman, Adamic.)

Moreover, Adamic and Glance have been very successful as researchers and community leaders while working in the technology industry, where women are underrepresented. Given the many obstacles that women in computing face, the productive careers of Adamic and Glance, and their generous, visionary service to ICWSM are an inspiration. As tennis legend Billie Jean King has said with respect to the importance of role models in sport, “You have to see it, to be it.” We hope that the award named in their honor will contribute to achieving such much-needed visibility for women in social computing.

The award is open to young researchers of any gender, race, ethnicity, and location. The winner will be invited to give an ICWSM plenary talk in the successive year of their award, providing them with a platform to elevate their research contributions. ICWSM will maintain a dedicated web page as an honor roll for all award winners over the years. We are also presently exploring the possibility of elevating this to be an AAAI award<sup>8</sup>, which would further add to its prestige.

#### **4.5 Introduction of DEI Chairs to the Organizing Committee**

ICWSM 2021 also saw the introduction of new DEI chairs to the organizing committee. These chairs focused on three key roles:

The Diversity, Equity, and Inclusion Chair leads efforts to ensure a welcoming and inclusive environment for everyone at ICWSM, regardless of race, ethnicity, gender identity, sexual orientation, religion, belief system, family status, etc. Duties include advising on keynote selection, ensuring inclusive registration forms, auditing deadlines and conference dates to minimize conflicts with holidays, drafting a Diversity, Equity, and Inclusion (DEI) code of conduct for conference attendees, holding interest group meetings for certain underrepresented groups, and managing applications for support from underrepresented participants. This person will also be the contact for any complaints (to be managed in conjunction with the organizing committee) and more generally, responsible for an accountability statement which transparently reports progress towards our DEI goals.

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<sup>6</sup> <https://dl.acm.org/doi/10.1145/1134271.1134277>

<sup>7</sup> <https://science.sciencemag.org/content/323/5915/721>

<sup>8</sup> <https://aaai.org/Awards/awards.php>

The Accessibility Chair leads efforts to gather accessibility needs and ensure that individuals have the necessary resources and facilities to participate in the ICWSM community, regardless of disability status. This includes securing necessary resources to provide accessible presentations (closed captioning, transcripts, etc.), accessible conference materials, allergy/dietary restriction management if there will be an in-person component, facilities management to ensure accessible bathrooms, nursing mother's rooms, and so on. In the long term, this individual would be involved in the selection of conference venues, and in the short term can ensure that there are accessible options within the constraints that we have.

The Global Equity Chair is in charge of ensuring international representation, including global equity in keynotes (e.g., not only keynotes from North America/Europe) and equity in timing around virtual events. This person would also assist with the creation of opportunities (e.g., scholarships) for individuals from underrepresented socio-economic status backgrounds, and World Bank Tier 2 and Tier 3 countries, and host interest group meetings for participants located around the globe. In the long term, this individual would be involved in the selection of conference venues, and in the short term can ensure global equity within the constraints we have.

These roles were advertised widely and filled by five keen applicants this year: Francielle Vargas and Naeemul Hassan (Diversity, Equity and Inclusion Chairs), Dakuo Wang and Panagiotis Andriotis (Global Equity Chairs), and Amira Ghenai (Accessibility Chair). These individuals have been central to work on DEI at this year's conference, including the creation of this report.

#### **4.6 Advertising the Conference in Different Languages**

While ICWSM is only conducted in English, we recognize the importance of broadening our reach globally through engaging with different languages. As such, and following best practice from colleagues at Mechanism Design for Social Good (MD4SG)<sup>9</sup> and ACM EAAMO<sup>10</sup>, for ICWSM 2021 we released a number of posts via the ICWSM Twitter account in multiple new languages. These included Hindi, Arabic, Persian, Urdu, Punjabi, Greek, Albanian, Mandarin, Spanish, German, Japanese, Italian, Finnish, and French. Our aim through these posts was to start an interaction with international researchers who would not typically notice the conference due to language or other perceived barriers, and most importantly, to set the foundation for future work dedicated to expanding our reach to new global communities. In following years, this may be extended to the call for papers, to panels or, as the circumstances allow, to some number of presentations or academic papers.

### **5. Planning for the Future**

ICWSM has made significant inroads in achieving our vision of a Diverse, Equitable, and Inclusive intellectual community. However, much work remains. Here, we identify high-priority projects for 2022 and beyond.

#### **5.1 Data**

Our efforts to understand DEI at ICWSM are limited by a paucity of data, particularly self-reported data from authors, reviewers, and participants. Using our initial data gathering (on gender, race/ethnic groups, accessibility requirements, and number of times they have attended ICWSM) in 2021 as a basis, we encourage future organizers to expand options for

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<sup>9</sup> <https://www.md4sg.com/>

<sup>10</sup> <https://eaamo.org/>

self-reporting gender, race, country of origin, disciplinary background, ability, and other variables that may inform the overall organization of the conference as well as high-priority DEI areas in the future. This could be gathered at conference registration and also during paper submission (to allow insights into regions/persons interested in the conference, even if they do not ultimately attend). As collecting, analyzing, and ethically reporting on these data requires significant expertise and may be time consuming, we recommend adding a Data Chair to future Organizing Committees so the person charged with this task can be appropriately recognized for their service.

Aspirationally, given the expertise in our community, we believe that ICWSM could be a leader in establishing standards and norms for collecting and reporting demographic and geographic data for authors beyond our own conference. Future innovations that enable safe and secure self-reporting could inform DEI efforts more generally.

## **5.2 Conference Organization**

ICWSM 2021's DEI efforts have significantly benefited from the shift to a virtual conference. It is simply not feasible to provide a fully diverse and inclusive conference that requires international travel and significant investments of time and money to attend.

As we move back to in-person gatherings, our vision for the future of ICWSM reflects our aim to redefine the processes around knowledge production, to facilitate real diversity in social computing research. However, commitments to include a diversity of voices need to respect academic independence<sup>11</sup> (Alatas, 2003) and indigenous knowledge systems<sup>12</sup>. Our recommendations are threefold, and are inspired by recommendations for academic dependency reversal suggested by critical scholars<sup>13</sup>: first, to include a broad conceptualization of “computational social science for development” in the scope of ICWSM, with the aim to create a platform to reflect on and promote the role of social science in different geopolitical contexts. Second, to continue to provide financial support for underrepresented and/or minority researchers, particularly those from Africa, South America, Asia, and Oceania, as well as those presenting research on these contexts at the conference. Financial resources significantly impact the ability of researchers from the Global South to attend our conference and, by proxy, participate in our community.

Third, build a vibrant and diverse social media research and computational social science research community by expanding the options to participate. For one, ICWSM can continue to offer virtual or hybrid participation options, even after it is possible to convene in person. There are many reasons that prevent participants from physically traveling to attend an ICWSM conference (finances, health, mobility restrictions, visa issues, family considerations, environmental concerns, etc.) Yet, the 2020 and 2021 conferences have shown us how effective and engaging virtual participation can be. Retaining these options, and pairing remote participation with reduced registration fees, is more accessible and inclusive. Another way to build a diverse community may be to expand the range of locations where in-person meetings are hosted. In the longer term, the conference should expand host locations, perhaps rotating between the Global South and Global North. One other important way to facilitate academic independence and diversity in participation is to create regional ICWSM chapters that are affiliated with the conference but also hold local research events. This may also be realized through physical locations set up around the globe in partnership

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<sup>11</sup> Alatas, S. F. (2003). Academic dependency and the global division of labour in the social sciences. *Current sociology*, 51(6), 599-613.

<sup>12</sup> Hendricks, C. (2018). Decolonising Universities in South Africa: Rigged Spaces?. *International Journal of African Renaissance Studies-Multi-, Inter-and Transdisciplinarity*, 13(1), 16-38.

<sup>13</sup> Alatas (2003 pp. 608)

with host institutions. Building on ideas floated at previous ICWSM conferences, a journal publishing longer-form theoretical perspectives can offer space to feature theories, epistemologies, and social systems conceptualized by scholars from around the globe.

A final point worth emphasizing is the importance of creating safe spaces for conference attendees, be it during an in-person event or online. All persons, organizations and entities that attend AAAI conferences and events are subject to the standards of conduct set forth on the AAAI Code of Conduct for Events and Conferences<sup>14</sup>. We expect all persons who attend the conference to formally endorse this code of conduct, and to actively prevent and discourage any undesired behaviors. Everyone should feel empowered to politely engage when they or others are disrespected, and to raise awareness and understanding of this code of conduct. Following on from the efforts at ICWSM 2021, we recommend that the code is highlighted at events, and that there are clear procedures for reporting (identified or anonymously) and handling incidents that may emerge.

### **5.3 Conference Programming**

The conference program at each year's event provides an excellent opportunity to showcase and expand ICWSM's DEI work. There are several ways that the program can prioritize such efforts. The DEI Council recommendations to future organizers are as follows: (1) Engage with more women, non-binary, people of color, and/or international keynote speakers and commit to having such speakers featuring regularly on the program. Prioritize speakers outside of the US and Europe. Such speakers can bring a plethora of unique experiences and inspire new ideas and research avenues for the conference and the community. (2) Continue the series of excellent DEI-focused panels which allow the community to pause and critically reflect on the state of DEI and what steps may be required in the future. These panels may also look to involve researchers from other communities outside of ICWSM, who have also sought to increase DEI (as was done with ICWSM 2021's Global panel). (3) Cater more to an international audience by exploring the potential for panels and social events that are not only in English. This allows a clear pathway for new entrants to the ICWSM community who are currently inhibited due to language barriers. Finally (4) continue to live streaming signature programming (Keynotes, Special Panels) at different times of day to accommodate synchronous global participation and make these programs available for widespread, no-cost asynchronous engagement.

A closely related program topic is that of the academic papers published at ICWSM. Recently, other international journals and conferences (e.g., CHI) have begun requiring paper submissions to be accessible<sup>15</sup>. Accessibility guidelines provided relate to both the format of papers and how their content is presented. Such guidelines are intended to ensure that articles can be read, and interacted with, in different ways – for instance, through speech and braille display. These are noteworthy aspects and can greatly increase the accessibility of research emerging from ICWSM. The DEI Council therefore recommends that ICWSM investigate the implementation of a set of accessibility guidelines for paper submissions which authors should abide by. The reasons of this decision should be clearly communicated and explained to allow potential authors to appreciate why the conference has made this request and the importance of DEI to the community.

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<sup>14</sup> <https://aaai.org/Conferences/code-of-conduct.php>

<sup>15</sup> <https://chi2021.acm.org/for-authors/presenting/papers/guide-to-an-accessible-submission>

## 5.4 Global Conference Reach

To successfully engage with global audiences, it is essential that ICWSM builds networks across the globe. These can be constructed through the regional hubs mentioned above but also through increased engagement with key touch points. During our planning for this year's conference, we quickly recognized how limited our contact networks and relevant mailing lists/channels were, especially in regions such as South America, Africa, China, Japan and India. Our attempt to rectify this by reaching out to new networks highlighted another challenge - ICWSM was not listed/ranked on some main conference ranking websites, such as the Computing Research and Education Association of Australasia, CORE<sup>16</sup> or China Computer Federation (CCF)<sup>17</sup>. This highlights the importance and pressing need of building the profile of the conference internationally.

The DEI Council therefore recommends that future ICWSM efforts look to significantly expand international participation and prioritize building an international profile. Through the use of our international networks, ICWSM should pay special attention to how the various calls for papers are disseminated, which networks are used, and how the conference can build a profile internationally (such as within CORE and other platforms). Finally, global expansion will necessarily be limited by an English-only participation requirement. To facilitate full participation by researchers with limited or no English language ability, work towards including presentations and proceedings in other languages, expand the reviewer pool to handle non-English submissions, or, at minimum, offer bilingual copyediting assistance for non-native speakers.

## 5.5 Conclusion

2020 and 2021 were years of unprecedented global hardship and turmoil. At the same time, shifts in attention to issues of racial and gender injustice, accessible technology, and global interconnectivity highlighted the urgency of improving equity in many different sectors, including scientific and industry research. The 2021 ICWSM DEI Council, with the full support of the Organizing and Steering Committees, made inroads towards a future where researchers from around the globe feel fully welcome and included in our community. It is our sincere hope that our work serves as a foundation for ongoing commitments to Diversity, Equity, and Inclusion across all aspects of future ICWSM conferences, and potentially also related conferences in the wider community.

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<sup>16</sup> <http://portal.core.edu.au/conf-ranks/?search=icwsm&by=all&source=CORE2021&sort=atitle&page=1>

<sup>17</sup> <https://www.ccf.org.cn/>