The We Count Recount: March 2021



We Count is a community-driven project that addresses the inherent bias against small minorities and outliers in artificial intelligence and data analytics.

The We Count Recount is We Count's monthly newsletter, filled with information about the project, our initiatives and activities, and highlights from our extensive resource database.

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A Message from Our Director

Friends and colleagues,

At the IDRC we are aware that the escalating innovations that change our lives are not designed for everyone. Often, the people that need them the most and are most vulnerable to the unintended harm, are the people that are excluded. This harms everyone eventually and impoverishes our society. We believe that to change this pattern requires the full participation of the communities that are currently excluded, from the very start. Unfortunately, the very process of innovation and design is structured to exclude. The language is not understandable. The issues are overwhelming and complex. Many important pieces of information are kept from the people that will feel the greatest impact. It is hard to participate meaningfully in a process when you don't have the essential information.

Data science and artificial intelligence is one of these complex innovations that is sweeping through our world. If you are average or typical you can just trust that the innovation is made for you. You don't need to get involved and you don't need to understand the possible harms and benefits. If you live with a disability you don't have this luxury. It is most likely that you will be the first to feel the unintended harms and new barriers. Unless you fight for the potential benefits, the market incentives will not naturally produce things for you.

This newsletter is a small step to address this. We hope to translate the obtuse geek speak and academic lingo so it is more understandable. We will find the important and relevant pieces of information in the overwhelming sea of chatter. We hope that it will make it possible for the most important people, those with lived experience of the barriers and opportunities, to participate meaningfully in this innovation.

All my best,

Jutta

PS While writing this and feeling the enormity of the task before us, I heard the news that my dear friend Justin Clark¹ has died. Words fail to express the sadness and loss, but the reflection on the magnitude of the change he wrought in his too short life bolsters my hope and resolve. If Justin can change the pattern of century-old institutions and mindsets with everything stacked against him, we can collectively push this innovation in more inclusive directions.

¹https://www.cbc.ca/radio/sunday/november-25-2018-the-sunday-edition-with-michael-enright-1.4911588/how-justin-clark-s-fight-for-independence-transformed-disability-rights-in-canada-1.4911590

News from the Field



https://youtu.be/iX3YnSyxtAY

AI, Fairness and Bias²

This Sight Tech Global 2020 panel with Dr. Jutta Treviranus looks at examples of where AI technologies inject bias against people with disabilities and offers approaches to help address these issues from the ground up.

How Can We Keep Algorithmic Racism Out of Canadian Health Care's AI Toolkit?³

A recent Globe and Mail article⁴ delves into healthcare's long history of racial biases and how they prevent AI algorithms from giving everyone the best treatment.

Auditing for Algorithmic Discrimination⁵

A Computer Weekly article 6 asserts that, despite the abundance of decision-making algorithms with social impacts, many companies are not conducting specific audits for bias and discrimination that can help mitigate their potentially negative consequences.



²https://youtu.be/iX3YnSyxtAY

³https://www.theglobeandmail.com/life/health-and-fitness/article-how-can-we-keep-algorithmic-racism-out-of-canadian-health-cares-ai/

⁴https://www.theglobeandmail.com/life/health-and-fitness/article-how-can-we-keep-algorithmic-racism-out-of-canadian-health-cares-ai/

⁵https://www.computerweekly.com/feature/Auditing-for-algorithmic-discrimination

⁶https://www.computerweekly.com/feature/Auditing-for-algorithmic-discrimination

https://youtu.be/Zzwek-EqGfq

Disability Rights and Inventing the Accessible Future⁷

The Sight Tech Global 2020 Disability Rights and Inventing the Accessible Future panel discusses strategies for creating a future fully accessible to people with disabilities.

In AI Ethics, "Bad" Isn't Good Enough8

While AI ethicists focus on the harmful consequences of AI systems, this blog post ⁹ discusses how we shouldn't conflate arguments that AI systems have harmful consequences with arguments about what we should do.



Bringing the People Back In: Contesting Benchmark Machine Learning Datasets 10

A new paper¹¹ about the creation of datasets and the values that influence the choices of data collection.

Study Finds Diversity in Data Science Teams Is Key in Reducing Algorithmic Bias 12

A new study on the sources of bias among AI developers stresses how more diverse teams will reduce the chance for compounding biases. Read the VentureBeat article ¹³ for more details.



⁷https://youtu.be/Zzwek-EqGfg

⁸ https://askell.io/posts/2020/12/bad-isnt-good-enough

⁹https://askell.io/posts/2020/12/bad-isnt-good-enough

¹⁰https://wecount-cms.inclusivedesign.ca/wp-content/uploads/2021/01/Bringing-the-People-Back-In.pdf

¹¹ https://wecount-cms.inclusivedesign.ca/wp-content/uploads/2021/01/Bringing-the-People-Back-In.pdf

¹² https://venturebeat.com/2020/12/09/columbia-researchers-find-white-men-are-the-worst-at-reducing-ai-bias/

¹³https://venturebeat.com/2020/12/09/columbia-researchers-find-white-men-are-the-worst-at-reducing-ai-bias/

https://youtu.be/TWWsW1w-BVo

Gender Shades 14

Explore the Gender Shades project and how it evaluates the accuracy of AI-powered gender classification systems, demonstrating the need for increased transparency in the performance of any AI products and services that focus on human subjects in this video.

The Robots Occupying Our Sidewalks¹⁵

Technology companies often fail to design and develop AI with persons with disabilities in mind. As this TechCrunch article¹⁶ highlights, no-contact delivery robots are just one of many examples of this systemic issue.

Initiatives



https://voutu.be/C 2IFeH9v2I

1 - Future of Work and Disability: AI Employment Systems

It's not too late to participate in our Future of Work and Disability webinar series!

Our first installment on AI Employment Systems provides an introduction to AI and machine learning with a focus on how AI creates barriers and opportunities for persons with disabilities in the hiring, training and retention of employees. This webinar features:

- Anhong Guo, University of Michigan
- Shari Trewin, IBM
- Ben Tamblyn, Microsoft

¹⁴https://youtu.be/TWWsW1w-BVo

¹⁵ https://techcrunch.com/2020/08/11/the-robots-occupying-our-sidewalks/

¹⁶https://techcrunch.com/2020/08/11/the-robots-occupying-our-sidewalks/

Chancey Fleet, Data and Society

 $Visit\ our\ You Tube\ channel^{17}\ to\ see\ past\ we binar\ recordings.$ New videos\ are\ released\ regularly, so\ be\ sure\ to\ subscribe.

We Count Badges



Earn badges with We Count! Our badges enable earners to showcase their proficiency in AI, data systems and inclusive data practices. To find out more about the types of badges we offer and which badges are currently available, visit our website¹⁸.

IDRC News



Gender Equality in Science, Technology and Innovation

The IDRC is excited to be a partner in the Gender STI project. Gender STI is an international research project that aims to analyze the participation of women in science, technology and innovation (STI) dialogues between Europe and third countries. The project will focus on four key areas:

¹⁷https://www.youtube.com/channel/UC6iJU0P9YVg9oes1gE6AV3g

¹⁸https://wecount.inclusivedesign.ca/badges/

- 1. Gender equality in scientific careers
- 2. Gender balance in decision-making
- 3. Integrating gender dimension in Research and Innovation (R&I) content
- 4. Co-designing solutions to common challenges found in these areas through a design-thinking process

The Gender STI ¹⁹consortium is made up of partners from **sixteen countries in four continents.** The project is honouring **International Women's Day 2021** with the #WomenInLeadership²⁰ campaign, which celebrates women leaders in science, technology and innovation and sheds light on their journeys, challenges and goals.



2 - https://www.gender-sti.org/women-in-leadership-campaign-iwd-2021/



Future of Work and Disability

The Future of Work and Disability project is in the process of preparing a report that summarizes the project's efforts to understand and examine intersecting topics of AI, automation, standards and employment as they relate to persons with disabilities with the assistance of their fifteen-person study group.

In addition to the report currently under development for Accessibility Standards Canada, the FWD project created:

• Learning opportunities from our webinars

¹⁹https://www.gender-sti.org/

²⁰https://www.gender-sti.org/women-in-leadership-campaign-iwd-2021/

- Badges that can be used by learners to demonstrate their proficiency in the field
- A learning program that will be publicly available at the close of the project

Find out more about the project in the Future of Work and Disability summary. ²¹

Learn More

Discover how We Count is addressing bias and developing new machine learning strategies that recognize and serve people with disabilities in this video.



https://youtu.be/mFvXqQMLdNw

Are you interested in hearing about We Count activities or do you want to be contacted to learn about ways you can participate? If you are, then send us your contact information using our contact form²².

Contact Us

We would love to hear from you!

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²¹https://wecount.inclusivedesign.ca/views/the-future-of-work-and-disability/

²²https://forms.gle/WuCk59iQtiRX3sLC7

²³mailto:wecount@inclusivedesign.ca

Visit the We Count website 24 and follow us on social media (@WeCountProject).

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²⁴https://wecount.inclusivedesign.ca/

