

**IEEE P7003 Working Group
Meeting Minutes
8 December 2017 /10:00 A.M. – 11:30 A.M. EST
Teleconference**

1. Call to Order

The meeting was called to order at 10:03 A.M.

2. Roll call and Disclosure of [Affiliation](#)

The list of attendees present is attached.

3. Approval of December Agenda

Motion to approve the meeting agenda from 8th December, 2017. The agenda was approved as submitted without objection.

4. [IEEE Patent Policy](#) (Call for Patents)

The call for patents was raised; no one raised any concerns or any comments for consideration.

5. Approval of 17 November meeting minutes

Motion to approve the minutes from November 17th, 2017. The minutes from the November 17th, 2017 meeting were approved without objection.

6. Updated Outline Discussion

I. Update on Use Cases

Maroussia has added two use cases, see the Google doc. She is happy to answer questions if anyone wants to get in touch.

Sheila D introduced a framework for evaluation and discussion, which brings up an alternate perspective to consider and a different approach to data ownership. Added to meeting at point 6.VI below.

II. Stakeholder analysis (Pascal)

Two challenges identified: classifying bias, and trying to set boundaries for where the discussion of bias begins and ends (moves too far into a different area). SA aims to identify people and groups who are affected by bias in algorithms and try to classify and link with dimensions that govern their position (eg favourable/unfavourable). There is a shared google doc and a link on the group website. They are looking to define areas for dealing with complications of bias separate to what bias is.

III. Topic update: Bias Taxonomy (Pascal)

Some different ideas and frameworks for taxonomy examples from the literature have been collected, and are currently being condensed to try and find a general model. At the end of the google doc action headings are in red, they are *actively seeking input to help bring the taxonomy together. If you have any examples of protected markers in discrimination and bias, please send them over. Opinions are also sought on whether the ideas put forward in a paper suggested by Francien is not broad enough* (<https://arxiv.org/abs/1609.07236>), and examples that cannot be captured in the framework. The framework does not make concrete decisions about degree of bias and mechanisms – they are *seeking input on classification and description of why and how a specific class of algorithms causes a specific type of bias*. It is appealing to try and distinguish no bias from any bias but in practice we need a degree of freedom so *what is a sufficient degree of bias to be considered bias?* Anyone who has any input please get in touch – they have calls once a month about 2 weeks before the main group meeting. Thank you to everyone who commented or dropped in ideas at the meeting. There will be a doodle poll or similar for the next meeting.

IV. Topic update: Legal context (Maroussia)

The next step is to fill in the legislative landscape; there is a section in the taxonomy google doc that has a draft version of the international landscape. *Anyone with any input please add it to the document, especially knowledge of how legal systems work in different areas.*

Data harm repository: <https://datajusticelab.org/data-harm-record/>

Privacy Tools: https://privacytools.seas.harvard.edu/formal-privacy-models-and-title-13?admin_panel=1

V. Topic update: Psychology & Bias

There is currently a push to collect health information including mental health data, which has issues for patient privacy. However, this medical aspect of psychology is distant from the original idea of the psychology and bias subgroup – the inherent bias in cognition. Nothing substantial has been decided yet – *anyone who wants to take the lead get in touch.*

Linguistics and semantic analysis may be another interesting area: machine learning models used for translating may have issues in that how humans process meaning and information is not the same as how algorithms do. Also raised were cultural differences in psychology and medicine. Yohko can give input into cultural issues, as the group currently talks very much about the US and Europe.

Action: Yohko to suggest a framework for next meeting.

Anyone interested in helping could be involved in a short call. Matthew S expressed interest.

Also raised by Maya were the implications of financial technologies and how they use personal data to make assessments and sell credit etc. How are particular sectors governed legally in different parts of the world, especially where there is no algorithmic regulation or curation? Suggestion of conducting a case study of (for example) fintech and credit schemes in a European company based in

Singapore with big markets in India and China, looking at context and regulation. Maya will have something written in the next few weeks.

VI. Framework discussion

This is a governance model/framework which covers Data sovereignty both as individuals and collectives. Non-recognition of personhood as a form of bias – what if they system doesn't recognize you as a person? Adds a group membership level between the individual and the regulators, an additional level for finding consensus and defining criteria for algorithms. Need to work towards a system that is least harmful to the most people. Raises issues of who is the effected party within issues of algorithmic bias, how are they defined, and what levels of control should they be having?

7. Progress with improving Working Group membership diversity

Ongoing but we still need people from other parts of the world. Suggestion that we may sometimes do a different time-shifted meeting call for people to join from Asia and so on if this turns out to be the issue, which can then be fed back into the main call.

8. Identifying and filling gaps in WG expertise

Need more psychology, especially of bias.

Discussion of meeting up at conferences and running events or workshops. Freya and Suchana have been preparing something for FAT* in February, which involves a proposal for the translation and tutorials section. The idea is to talk about the role of an ethics standard like this one, what it is, and why we need it, and then move on to discussing some of the progress made with P7003. Then break out into groups with case studies, hoping to look at how to articulate bias to stakeholders, stretch ideas and see what difficulties participants have with the standard with regards to real world scenarios. They also want to look at how to make principled choices when there are trade-offs involved, for example reducing one form of bias at the cost of another, incorporating competing definitions of fairness and so on. The conference involves experts in ML and AI so can stress test thinking. The workshop will close with feedback gathering and motivating and recruiting group members. Other suggestions included looking at positive versus negative bias, and preferential bias and social considerations. What bias are people comfortable with being built into a system? <http://balancestudy.org/balancer/>

From the group chat, Chris C suggested the ACM SIGKDD conference on Knowledge Discovery and Data Mining: <http://www.kdd.org/kdd2018/> Proposals probably due in February. Chris would be happy to take the lead on putting something together.

Suchana and Pascal also expressed an interest in looking at positive bias and nudges. Question whether this should be added to the bias taxonomy document or placed within the main working group document.

David V gave input on the more medical perspective, and volunteered their ML automated diagnostic device as a study. Medical perspective is added to the taxonomy as an interesting case because it is highly regulated.

Anyone who wants to volunteer for anything, email Ansgar and he will do his best to facilitate that you get in touch with the right people.

9. Future Meetings

Friday, January 12th, 10:00am-11:30am (EDT)
Thursday, February 15th, 10:00am-11:30am (EDT)
Wednesday, March 14th, 10:00am-11:30am (EDT)
Tuesday, April 10th, 10:00am-11:30am (EDT)
Monday, May 7th, 10:00am-11:30am (EDT)
Friday, June 8th, 10:00am-11:30am (EDT)

10. Adjourn

Meeting was adjourned at 11:17 AM

Attendees:

| Last Name | First Name | Employer/Affiliation | Voting |
|---------------|------------|---|--------|
| Chire | Josimar | ICMC | x |
| Clifton | Chris | Purdue University | x |
| Courtney | Patrick | tec-connection | x |
| Dean | Sheila | Independent author and consultant | |
| Dechesne | Francien | Leiden University | x |
| Dowthwaite | Liz | University of Nottingham | x |
| Ganesh | Maya | Leuphana University | x |
| Hatada | Yohko | EMLS_RI | x |
| Horner | John | Self | |
| Jurgens | Pascal | University of Mainz | x |
| Koene (Chair) | Ansgar | University of Nottingham | x |
| Levesque | Maroussia | Independent | x |
| Rovatsos | Michael | University of Edinburgh | x |
| Seth | Suchana | Berkman Kelin Center and Data & Society | |
| Stender | Matthew | Self | x |
| Vidal | David | IDx | |
| Bahn | Christy | IEEE-SA (staff) | |