IEEE P7003 Working Group
Meeting Minutes
5th July 2018 /3:00 P.M. – 4:30 P.M. UTC
Teleconference

1. **Call to Order**
   The meeting was called to order at 15:06 UTC
   Note that some people reported having trouble connecting via computer audio.

2. **Roll call and Disclosure of Affiliation**
   The list of attendees present is attached.

3. **Approval of July Agenda**
   Motion to approve the meeting agenda from 5th Juy, 2018. 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 8 June meeting minutes**
   Motion to approve the minutes from June 8th, 2018. The minutes from the June 8th, 2018 meeting were approved without objection.

6. **Announcements**

7. **Updated Outline Discussion**
   I. Update on Use Cases
      Discussion of police use cases raised by Allison Gardner. Marian Oswald had previously raised this issue. We do have the COMPAS use case (use case 7). Another possibility is Durham Police, who appear to have already made adjustments to their algorithm to deal with bias.
      Action: Allison to look to develop this use case

      i) Insurance Use Cases: there are some allowed discriminatory practices, led to discussion of fair versus unfair discrimination. Interesting for considering the context dependence of fairness. Insurance industries view an "information gap" between what the insured know and what the insurers know. IoT is seen as a way to close this gap.

II.   Topic updates – 5min summaries
    i.   Taxonomy (Pascal)
         Planning a meeting later in the month. Lyria noted that she is having difficulty connecting with this group due to time zone differences. Tim Farley also noted an interest in the group but has been unable to connect so far. A call will also be set up for alternate time zones.

    ii. Legal frameworks
         Ahbik has just joined this group, and asked if there was a separate call but Ansgar hadn't heard about anything.
         Action: Ahbik to email the legal frameworks team with suggestions for the document.

    iii. Psychology (BC via email)
         A team call is being set up.

    iv. Cultural aspects (via email)
         Team has emailed about plans to have progress by the August meeting.

    v.   System design stages (Chris)
         Chris and Epaminondas have been in discussion and have some ideas for an outline, using CRISP-DM (Cross-Industry Standard Process for Data Mining) as a baseline.
         Mark and Tim also got in touch about working with this team. Mark mentioned the potential interest in CRISP-DM when it was brought up; he would strongly support a model-based approach would receive strong support, and he is fairly conversant with its adoption in other standards. A metamodel approach of some sort seems appropriate. Example supplied by Mark: Typical of work in this (CRISP-DM) area, though not immediately relevant: Ã. Marbán and J. Segovia, "Extending UML for modeling data mining projects (DM-UML)," *Information Technology & Software Engineering*, vol. 3, no. 2, 2013. [Online]. Available: https://www.omicsonline.org/open-access/extending-uml-for-modeling-data-mining-projects-dm-uml-2165-7866-3-121.php?aid=19582

    vi. Person categorization (Subasree)
         There are plans for the team to connect, they are making progress

    vii. Representativeness of data (Michael)
         Haven't had meeting yet

    viii. Outcomes evaluation (Gerlinde)
         A call is planned for next week.
         Discussion by several team members of evaluation of broader socio-technical impact versus more localized system impact. For example, perhaps the system is unfair but if it does not impact the lives of

individuals, it is very different from a system that impacts individual rights.

Allison thinks this could be included.

Concern that impact assessment of outcomes may have implications for many other areas. Suggestions to either:

i) Have separate new section that focuses on impact assessment

ii) Have person(s) who will do a cross-section check to identify impact assessment, but still keep the discussion about impact assessment as part of the Outcomes Evaluation section.

Preference among people on the call was for option ii). Work on this could be done in October after the integration of section drafts into the main document which is planned in September.

   ix. Evaluation of processing (Michael)
Planning a meeting in the next week or two

   x. Resilience against manipulation (Michael)
Call planned for next Friday. They are looking for more people to contribute to this section.

   xi. Documenting & transparency
No update.

8. Algorithmic Bias Evaluation Toolkits

I. Accenture – "AI Fairness Toolkit" (Allison and Anurag)
Allison: The toolkit does not only look at sensitive variables, but also how other variables affect an outcome. Measurements are in terms of false positive/false negative. Graphs are produced graphs with respect to accuracy vs. fairness.
Anurag: Accenture Teach and Test group (https://www.accenture.com/us-en/service-application-testing-overview) – Teach/test mode, including approaches for de-biasing of training data. Test mode uses metamorphic testing. Has structured data as well as text/image data use cases.
There is no clear timeline for the release of information

II. University of Chicago – "Aequitas"
Not discussed.

9. Conferences and Whitepapers

I. Team to present P7003 at KDD project showcase
Adam Smith to take lead on presenting.

II. FAT* Conference https://fatconference.org/2019/cfp.html
Action: people interested in working on P7003 related submission to FAT*, please let Ansgar know (currently Lilian Edwards, Raymond Bond have indicated interest in working on a submission)

III. ITU Data for Good – journal paper
Mathew and Alejandro are structuring this around the use of algorithms in the insurance context

Action: Ansgar to connect Matthew/Alejandro to Srivathsan and Subasree who wrote the insurance use case

IV. WTO Public Forum submission on "Algorithmic accountability for a trusted digital economy"
Submission not accepted, still working to get involved.

V. KAIST workshop - "Taming AI: Engineering, Ethics, and Policy"
Ansgar gave a talk about P7003

10. Any Other Business

Vicky: Does the outline form a table of contents? Where would precautionary principle fit? Suggested using ISO/IEC/IEEE 15.288 system lifecycle process standard as model. Mark U agreed although a "light touch" may be needed. IEEE 1012 has obvious relevance. Suggestion that ISO 26000 could be used for a crosswalk.
[Vicky sent IEEE 15.288 and ISO 26000 documents. Ansgar placed them "IEEE-ISO-IEC Standards (Not for Distribution)" folder within P7003 iMeet space. (contact Ansgar if you have problems accessing)]
Matthew: Is going through the AI National Strategy documents, some things that are relevant. Matthew will keep on top of this.

11. Future Meetings

Thursday August 2nd, at 3pm UTC
Thursday September 6th, 3pm UTC
Thursday October 11th, 3pm UTC
Thursday November 8th, 3pm UTC
Thursday December 6th, 3pm UTC

12. Adjourn

The meeting was adjourned at 16:00 UTC

Attendees:

Last Name	First Name	Employer/Affiliation	Voting
Choudhuri	Abhik	Tata Consulting Services	
Clifton	Chris	Purdue University	X
Courtney	Patrick	Tec-connection	X
Dwarakanarth	Anurag	Accenture	
Gardner	Allison	Keele University	
Gautam	Sumit	LG Electronics	
Gwagwa	E Arthur	Strathmore University	X
Hailey	Victoria	VHG	x
Jurgens	Pascal	University of Mainz	X
Koene (Chair)	Ansgar	University of Nottingham	X
Moses	Lyria Bennett	University of New South Wales	
Nadel	Larry	NIST	X
Rovatsos	Michael	University of Edinburgh	X

Sampath	Subasree	TATA Consultancy Services	X
Smith	Adam L	Piccadilly Group	
Stender	Matthew	Self	X
Weger	Gerlinde	Independent	x

Bahn   Christy   IEEE-SA (staff)