

**IEEE P7010 Working Group Meeting  
Meeting Minutes  
7 September 2017, 4:00 PM – 5:30 PM (EDT)  
Teleconference**

**1. Call to Order**

The call to order was made at 4:04 P.M. by John Havens, Working Group Chair. He welcomed everyone to the meeting.

- 2. Roll call of Individuals (Working Group Establishment)** Attendees present stated their name and affiliation. The Working Group was established. A list of attendees is attached.

**3. WG Policies and Procedures (P&P)**

Christy Bahn noted that there is one set of working group policies and procedures for all working groups that are sponsored by IEEE Systems, Man and Cybernetics Society Sponsoring Committee. Working Group members should abide by these procedures. The policies and procedures will be posted in iMeet. Working group members should read the document, specifically section 4.1.1 Working Group Member Status. This section explains how voting membership is maintained, lost and gained.

John explained that the Working Group would use iMeet Central. It is a web-based collaboration tool offered to working groups. Working Group members can share documents, post articles, start discussion, etc..

**4. Approval of Agenda**

Laura motioned for approval, Carole seconded. The agenda was approved as submitted without objection.

**5. IEEE Patent Policy (Call for Patents)**

The call for patents were made with a question about provisional patents that will be forwarded to Christy Bahn for more information.

## 6. Establishment of Officers

- **Vice-Chair**, Laura Musikanski
- **Secretary (open position)**

Laura was introduced as the Working Group Vice-Chair and the opening of the Secretary position was announced. Aladdin asked for more information on the position. If his schedule allows he would be interested in the position. Christy will reach out to him with more information.

## 7. Outline

Our goals are to:

- 1) Identify well-being indicators, put them together, Identify what indicators we can use,
- 2) Translate through provision a standard (voted upon) for AI creators can use regardless of their knowledge level of WB, and
- 3) Identify a path of implementation (correlate and connect, such as a flow chart for AI developers)- use of data from AI systems correlating with WB indicators sets to understand the impact of AI

The group was asked to think about what sections you are passionate about, what parts you want to start writing, contribute to the outline. What area would you like to research and write? We can set up sub committees. Engineers, thinking through PAR doc and break into outline format to honor PAR,

The country of Bhutan has an annual gross happy index provided by Stewart. Therefore, events such as "Brexit" should be closely monitored or other nonstandard metrics. Laura works with Bhutan in this area and can reference her experience regarding the indicators used.

Frank mentioned he measures happiness by cognitive functions. He defines Happy with measures of wellbeing such as desirable on one end and sadness on the other end of the spectrum.

John noted the Ethically Aligned Designed paper information that we can use as it is a public document as a resource. This will introduce an array of metrics that can be utilized.

Laura has introduced an idea of creating a video for new participants to understand and quickly integrate to all discussions taking place.

The ultimate goal is for someone looking to create AI aside from the general safety by using our standard, wellbeing indicators are taken into account.

The Standard does not yet exist that has confidentiality as an example. The ability to analyze people without their consent for ethical requirements does not exist. This is important since, there is no indication that AI can determine human cognitive patterns by reading certain aspects of the human eye.

P7008 will be working in regards to nudging. With effective computing AI can have an understanding of human emotion the point of using it and coupling it with nudging and even though not ill intended can serve the human accidentally.

We have not discussed the definition of AI. Intelligence is the ability to predict the future. For example, if you are able to put one foot in front of the other then you are intelligent. This point is important to then differentiate artificial intelligence and artificial general intelligence.

Do we have plans in incorporating culture and happiness?

One thing that would help with wellbeing indicators we can reference the index of happiness in Bhutan and see how and where that can be applied everywhere else. Therefore, we should be able to have a cultural flexibility.

John noted we can categorize the outline as a recommendation. We will be using iMeet to note any works, discussions, or areas of interest to the entire Working Group. Please put your publications on the iMeet workspace to help form the scope.

## **Issues:**

### Defining Well-being Metrics

- What well-being metrics are, who is using them and how,
- What is the scope and depth of areas they measures,
  - Positive and negative affect, eudaemonia (flourishing), satisfaction with life and the conditions of life including social trust, government, environment and climate change, economics and standard of living, work, time balance, community, social support, health, education and lifelong learning, arts and culture, housing, transportation, technology, etc.
- How many different well-being metric sets are there, how they compare, how they differ, how they are used.
- Build on current use of well-being measurements by governments (Bhutan, UK ONS, etc) and other institutions,
- Understand how impact of current events (Brexit, etc) on well-being data.
- Understand how the use of well-being measures are used to define positive and negative affect and impact the pursuit or avoidance of an affective state

## **Defining AI**

- Having a clear and useful definition of AI that serves the present and future so well-being metrics are not made obsolete as AI develops due to the definition of AI.

## **Defining the Impact of Cognitive Biases**

- Understanding and accounting for the impact of evolutionary biology driving our behavior and cognition.
- Understanding and accounting for our projection onto AI of how we behave, and how other animals and non-humans behave.

## **Consent**

- Understanding the impact on humans of use of AI to automatically analyze the state of mind of a person when there is not consent, both for isolated and in crowd situations.,
- Defining the difference between intentional manipulation, accidental manipulation, and consent driven nudging for effective computing, etc.
- Defining the difference between situations where consent is not given, indirect consent is given, and direct consent is given in situations where AI is monitoring people and other situations

## **Data Collection**

- Understanding and defining ethical and unethical data collection methods

## **Implementation**

- Well-being measurements ability to address emotional systems and the ability of AI to recognize people's emotions and state of mind, alter communication to the human and impact a human's emotional state and overall well-being of a person.
- Final product look and feel: flow chart, app, checklist, etc.

## **Professional ethics**

- Defining when and how technologies would be required to consult or otherwise interact with professional bodies when developing technology that impacts human well-being as technologists are often not trained psychologists nor are they bound to any code of ethics.
- Understanding whether to and how to educate technologists in well-being and human psychology or the role IRB type approval would play.

## **Culture**

- Understanding how to address cultural differences in orientation to happiness and well-being in terms of terminology, interventions and other factors.
- Including cultural flexibility in the implementation process for well-being measurements, such as different value systems (placing individual or group well-being higher).
- Understanding the differences and overlap of universal ethics, cultural values, well-being metrics, and well-being interventions.

## 8. Future Meetings

- 16 October, 2:00 PM – 3:30 PM (EDT)
- 17 November, 2:00 PM – 3:30 PM (EDT)

## 9. Adjourn

The meeting adjourned at 5:28 P.M.

### *Attendees:*

| <b>Last Name</b> | <b>First Name</b> | <b>Employer/Affiliation</b>       |
|------------------|-------------------|-----------------------------------|
| Ayesh            | Aladdin           | Dumont University                 |
| Borenstein       | Jason             | Georgia Institute of Technology   |
| Brown            | Bud               | Self                              |
| Carey            | Carole            | IEEE Engineering Medicine Society |
| Chen             | David             | Self                              |
| Coget            | Aymee             | CEO of Happiness for Human Kind   |
|                  | Stuart            |                                   |
| Dambrot          | Mason             | Self                              |
| Folsom           | Tyler             | University of Washington          |
|                  |                   | Instituto Politecnico de Castelo  |
| Goncalves        | Paulo             | Branco Portugal                   |
| Havens           | John              | Consultant                        |
| Haz              | Kaiser            | University in Malaysia            |
| Hutson           | Matthew           | Self                              |
| Jackson          | Quinn             | Self                              |
| Kiana            | Mahsa             | Self                              |
| ManMadkar        | Vinayak           | Self                              |
| McEnroe          | Martin            | Self                              |
| McEnroe          | Martin            | AT&T                              |
| Moakler          | Dean              | BT Systems                        |
| Musikanski       | Laura             | Happiness Alliance                |
| Pratt            | James             | AT&T                              |
| Quinn            | Jackson           | Self                              |
| Ratcliff         | Bill              | Self                              |
|                  |                   | University of Toronto and         |
| Rudzicz          | Frank             | WinterLight Labs                  |
| Towne            | Ben               | Self                              |
| Villeneuve       | Sarah             | Self                              |
|                  |                   |                                   |
| Alvarado         | Natasha           | IEEE-SA (staff)                   |
| Bahn             | Christy           | IEEE-SA (staff)                   |