

IGF 2019
BPF Internet of Things - Big Data - Artificial Intelligence

Virtual meeting II
Monday 1 April 12pm UTC

Summary

Introduction

1. The Best Practice Forum (BPF) IoT-Big Data-AI is an intersessional IGF activity allowing for stakeholder exchange on issues pertaining to the use of IoT, Big Data and AI in an Internet context, and intended to produce a tangible outcome leading into IGF2019 (25-29 Nov, Berlin, Germany). Participation is open, all interested in the BPF IoT-Big Data-AI are invited to subscribe to the BPF mailing ([subscribe here](#)) and join the BPF's virtual meetings.
2. The BPF's first virtual meeting suggested an overall narrative for the 2019 work: *"Enhancing Justified Trust in IoT-Big Data-AI, to stimulate their use to address societal challenges that otherwise would be difficult to address."*

Discussion on the BPF's focus

3. It was reminded that the BPF limits its scope to the combined use of IoT, Big Data and AI in an Internet context. One participant phrased it as follows: IoT generates big data which AI and machine learning help to analyse.
4. It was felt that the BPF should look at trust as a broad concept with multiple layers and explore different factors that influence trust in the use of IoT-Big Data-AI to address societal challenges. Participants mentioned among others: security, liability, reliability, business ethics, and transparency. The perspective could be further refined by asking questions such as 'Trust by whom?', 'Trust in what?' or 'Trust by what purpose?'. A participant suggested a distinction between trust at macro level (e.g. geographic differences) and micro level (e.g. how individual companies foster trust with ethical guidelines or commitments).
5. In addition, the BPF should reflect on how the application of the new technologies and tools creates new considerations and challenges in the society.
6. The BPF participants brainstormed on pertinent policy questions related to the use of IoT-Big Data-AI. They are grouped below:
 - a. Policy and regulations: What is the impact of existing policy and regulations on the development, uptake and use of IoT-Big Data-AI applications? How can governments help their citizens separate fact and useful analysis from the hype and horror stories regarding new technologies, to foster effective policies and best possible use of new opportunities? Who sets the agenda for AI/machine learning development, and what concerns are and are not included in these discussions? What are examples of governments, companies, foundations, and other organisations are effectively investing in

new applications of AI and machine learning to IoT data? Where stand low and middle income countries in terms of the application of IoT-Big Data-AI technologies?

- b. Data collection and data quality: the use of IoT-Big Data-AI increases the importance of secure and reliable data of a high quality. How can companies and governments foster the collection of high-quality datasets so that machine learning systems are trained using accurate and representative data? What are potential impacts (pos/neg) of existing regulations (e.g. GDPR, right to be forgotten, copyright legislation etc.) on the collection of data and is there a risk that they lead to incomplete or biased datasets? Does the collection of certain data or the use of certain IoT-Big Data-AI technologies conflict with a privacy considerations?
- c. Case studies of successful applications of IoT-Big Data-AI: How can AI/machine learning improve cybersecurity and make the Internet more useful to people?

Outreach and information collection

7. It was suggested to develop an online questionnaire to facilitate the collection of input for the BPF discussions and case studies on the use of IoT-Big Data-AI. "Which of the applications that combine IoT-Big Data-AI have you most excited and which have made you most fearful?" was suggested as a key question.
8. Participants were invited to continue to spread the word on this BPF IoT-Big Data-AI within their networks and suggest venues and mailing lists where the BPF could be promoted.
9. Background information and sources recommended during the call:
 - <http://wetheinternet.org> - 'Global Citizens' Debate on the Future of the Internet' aims at bringing the views of citizens into the discussion, IoT-Big Data-AI is one of the topics.
 - <https://www.pewinternet.org/topics/future-of-the-internet/> - PEW Research Center.
 - Ongoing research by Laura Denardis - <https://www.american.edu/magazine/article/worrisome-wifi.cfm>
 - Survey on the EU AI Landscape - <https://ec.europa.eu/digital-single-market/en/news/european-artificial-intelligence-landscape>

Date Next Meeting

Monday 15 April 2019, 12pm UTC

Meeting recording

<https://intgovforum.webex.com/intgovforum/ldr.php?RCID=8a76b367fa2a526183df3afa00b8800f>

List of Participants (names as self-registered in webex)

Alex Comninos (BPF co-coordinator)
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