# Humans in the Loop: Learning to Trust in AI but to What Extent?

SPONTANEITY makes life worth living. If we had all the answers to every question and could accurately predict the result of our actions and choices before embarking on a particular path into the future, human life would be substantially different—some might even say boring. The fact that we must strive through things ourselves, make mistakes, and learn from them, provides a certain level of freedom that none of us should take for granted. It was not that long ago that we would get into a car with a street directory on our laps, excited to explore a new route for the first time, instead of just delegating our route selection to the shortest path algorithm and relying on it to get us to our destination. While we are all grateful for the ease with which we can now navigate the world, there is an opportunity cost generated by an augmentation–automation paradox.

The frictionless manner in which we can now transact, propels responses back and forth, that we simply cannot keep up with. The elimination of physical acts in preparation to send or receive a message, has meant that our reflection and consumption time of that information has been reduced. But if that is not enough, we have now also eliminated the human interaction in favor of machine responses in the name of performance gains promised by "self-service." As part of the conditioning we call digital transformation, people have given up on call center human operators in favor of online chatbots. Empathy and interpersonal skills that we once depended on for work and play are now morphing into predictive online interactions. Expressive language once admired has now given way to no more than a few words. While this may be considered a new level of efficiency to some, few would disagree in that we have lost something of the essence of being human, despite all the perceived gains in transactional performance.

Fueled by anthropomorphic dreams, we are each training our machines connected to the Cloud to act in our similitude: to respond like us, to use our phraseology and wording irrespective of its biases and prejudices, all with the push of a button. Where things might well get even more interesting is when algorithms and big data engines use automated data collection machines to watch and listen to us unobtrusively and, potentially, even covertly. Together, with additional parameters like location and condition information, being able to view someone's facial expressions and even hear the tone or content of what they are saying may be enough to drive an analytics engine to determine that someone is happy or sad, genuinely not excitable at all, or even "at risk" of particular situations.

Preemptive actions can be presupposed on individuals that may well intervene with a natural inclination to act in some way. What we do with the data we collect is one thing, and how we use it as evidence, diluting our accountability and a call to action is another. While we could declare a system as having implemented "ethical AI," there is no assurance the outcomes of that process will not create harm as it will undeniably interfere with human decision making. At what point does it become acceptable to act retrospectively on evidence gathered, say, through social media voice, image, and video data about an individual's circumstances?

In this final issue of the inaugural volume, we have two full-length papers. The first paper, "'Criminality From Face' Illusion" is written by Kevin Bowyer of the University of Notre Dame, Michael King from Florida Institute of Technology, and Walter Scheirer from the same department as Prof. Bowyer. This article dispels the myth that by analyzing a person's face, a machine algorithm can determine one's criminality or propensity to act criminally. The authors declare this criminality-from-face algorithm as "doomed to fail" and they provide evidence from their research as to why this is the case.

The second paper is an industry linkage between the University of South Carolina's Biplav Srivastava and IBM T. J. Watson Research Center and IBM Global Services. The paper is titled: "Personalized Chatbot Trustworthiness Ratings" and demonstrates how an observer can test the trustworthiness of a chatbot. The authors argue for a trustworthiness rating system that can help users choose between alternatives.

While Bowyer *et al.* argued that a "criminality-from-face" algorithm is in itself flawed and AI cannot tell us who we should not trust, Srivastava *et al.* postulated that a trustworthiness rating can be employed to identify less desirable AI. The key takeaway is that such AI systems should only be established when conclusive real-world evidence has been determined. Herein is a call to action that potential technology systems of prejudgment be abandoned at the initial concept stage and that we focus on building AI technologies that are beneficial to humankind.

A final note of thanks to the Co-Editors, Associate Editors, and Reviewers of TTS who have worked so hard in 2020. May we have continued success in 2021. Thank you for your support.

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