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NEWS RELEASE

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INFLUENTIAL COMPUTING RESEARCHERS AND PRACTITIONERS ANNOUNCE STEPS TO PREVENT ALGORITHMIC BIAS

ACM US Public Policy Council Issues Seven Principles to Foster Algorithmic Transparency and Accountability

NEW YORK, NY, January 12, 2017 – Algorithms, the set of instructions computers employ to carry out a task, influence almost every aspect of society. The explosive growth of data collection, coupled with increasingly sophisticated algorithms, has resulted in a significant increase in automated decision-making, as well as a greater reliance on algorithms in human decision-making. Industry forecasters believe software programs incorporating automated decision-making will only increase in the coming years as artificial intelligence becomes more mainstream. One of the major challenges of this emerging reality is to ensure that algorithms do not reinforce harmful and/or unfair biases.

A few examples of potential algorithmic bias that have been featured in government reports and news articles include: (1) Job hunting web sites: Do these sites send more listings of high paying jobs to men than to women? (2) Credit reporting bureaus: Does the data set that algorithms weigh in determining credit scores contain prejudicial information? (3) Social media sites: What factors go into determining the news items that are served up to users? (4) The criminal justice system: Are computer generated reports that influence sentencing and parole decisions biased against African Americans?

Recognizing the ubiquity of algorithms in our daily lives, as well as their far-reaching impact, the ACM US Public Policy Council (USACM) today issued a statement and a list of seven principles (https://www.acm.org/binaries/content/assets/public-policy/2017_usacm_statement_algorithms.pdf) designed to address potential harmful bias. The goals of the statement include: providing context for what algorithms are, how they make decisions, and the technical challenges and opportunities to prevent and mitigate potential harmful bias.

USACM is the focal point for ACM's interaction with US government organizations, the computing community, and the public in matters of US public policy related to computing and information technology.

The USACM statement asserts that these principles should guide every phase of software system development and deployment. “Algorithmic bias can occur even with the best of intentions,” said Stuart

Shapiro, USACM Chair. “This is, in part, due to the fact that both software development and its products can be complex and produce unanticipated results. Following these principles cannot guarantee that there will be no biased algorithms or biased outputs. But they will serve to keep computing professionals on the lookout for ways biases could creep into systems and provide guidelines on how to minimize the potential for harm.”

The Statement on Algorithmic Transparency and Accountability was designed to be consistent with ACM’s Code of Ethics. The effort was initiated by USACM’s Algorithmic Accountability Working Group.

USACM is organized around a committee structure. Each member of USACM serves on at least one committee. Policy statements originate at the committee level before being approved by the full USACM Council. USACM’s seven committee areas are: Privacy, Security, Intellectual Property, Law, Accessibility, Digital Governance and Voting. In June, the Council approved the addition of three new working groups to reflect the rapidly growing technology landscape: Internet of Things (IOT), Big Data, and AI/Algorithmic Accountability.

About USACM

The [ACM US Public Policy Council \(USACM\)](https://www.acm.org/public-policy) (<https://www.acm.org/public-policy>) serves as the focal point for ACM’s interaction with the US government in all matters of US public policy related to information technology. ACM US Public Policy Council statements represent the views of the Council and do not necessarily represent the views of the Association.

About ACM

[ACM, the Association for Computing Machinery](http://www.acm.org) (<http://www.acm.org>) is the world’s largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field’s challenges. ACM strengthens the computing profession’s collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

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