Letter from the Editor-in-Chief

The September issue of the Data Engineering Bulletin, curated by associate editors Prof. Chengkai Li of University of Texas at Arlington and Prof. Jun Yang of Duke University, features a collection of papers on the topic of combating misinformation.

Combating misinformation has become our society's great urgency and top challenge. In the last couple of years, through the two elections in the U.S., the world-wide Covid-19 pandemic, as well as numerous incidents such as the January 6 United States Capitol attack, we have witnessed the sad havoc wreaked by misinformation.

In the most recent issue of The Atlantic, Stanford researcher Renée DiResta wrote about misinformation and amplified propaganda, "Understanding the incentives of influencers, recognizing the very common rhetorical techniques that precipitate outrage, developing an awareness of how online crowds now participate in crystallizing public opinion—that is an education that Americans need."

While definitely a societal, political, and educational issue, misinformation is a challenge that the tech industry and the academia must come together to address. The algorithms we develop, taking each individual act of clicking or rehashing as reinforcing signals, have the blind tendency to dramatically amplify an original message no matter how ludicrous it might be, enabling it to sway public opinions significantly on issues ranging from the pandemic to democracy.

The papers in this issue are a great starting point. They cover a broad spectrum of topics such as reliability scoring of information sources, fact-checking of individual claims, misinformation detection in a large corpus, and the promises and challenges of investigative journalism. One area we need to look into more seriously is the credibility of not only the information source, but also that of each participant in the information propagation process, that is, to how much extent a participant can be considered as a credible sponsor of the information in question.

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