## Common Sense: the Dark Matter of Language and Intelligence (VLDB 2023 Keynote)

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## ABSTRACT

Scale appears to be the winning recipe in today's leaderboards. And yet, extreme-scale neural models are (un)surprisingly brittle and make errors that are often nonsensical and even counterintuitive. In this talk, I will argue for the importance of knowledge, especially commonsense knowledge, as well as inference-time reasoning algorithms, and demonstrate how smaller models developed in academia can still have an edge over larger industry-scale models, if powered with knowledge and/or reasoning algorithms.

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**Yejin Choi** is the Wissner-Slivka Professor and a MacArthur Fellow at the Paul G. Allen School of Computer Science & Engineering at the University of Washington. She is also a senior director at AI2 overseeing the project Mosaic and a Distinguished Research Fellow at the Institute for Ethics in AI at the University of Oxford. Her research investigates if (and how) AI systems can learn commonsense knowledge and reasoning, if machines can (and should) learn moral reasoning, and various other problems in NLP, AI, and Vision including neuro-symbolic integration, language grounding with vision and interactions, and AI for social good. She is a corecipient of 2 Test of Time Awards (at ACL 2021 and ICCV 2021), 7 Best/Outstanding Paper Awards (at ACL 2023, NAACL 2022, ICML 2022, NeurIPS 2021, AAAI 2019, and ICCV 2013), the Borg Early Career Award (BECA) in 2018, the inaugural Alexa Prize Challenge in 2017, and IEEE AI's 10 to Watch in 2016.

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