An important part of being a successful researcher and professor is helping bridge the gap between academic research and the outside world. Throughout my PhD career, I have repeatedly engaged with researchers and practitioners external to the University of Washington (UW), through collaborations with companies and non-profit research institutes and other outreach efforts, as described below.

Commercial Engagement & Technology Transfer

Alexa Prize Winning chatbot — During the Alexa Prize competition, our chatbot interacted with hundreds of thousands of customers in the US through the Amazon Echo devices. In doing this, I garnered invaluable experience designing systems that are customer-facing, and in particular, how to design for multiple customer identities and preferences. After winning the competition, we **transferred the chatbot hosting to Amazon Alexa Prize engineers**.

Other company collaborations — Throughout my graduate career, my research has led to several collaborations and partnerships with industry labs. For example, I co-authored several papers with researchers from the Allen Institute for AI [1, 2, 3, 4] and Microsoft Research [5]. Additionally, **several companies have used my research** output internally. For example, Netflix researchers have leveraged my connotation frames of power and agency [6], and WorkHuman and Embodied have started using Social Bias Frames [7] in their data analyses.

Academic Engagement and Outreach

Encouraging participation in commonsense and ethics research — Throughout my graduate career, I made a significant effort to promote and teach my research to academic audiences. For the ACL 2020 conference, I **co-taught a tutorial** on commonsense reasoning for NLP [8], the recording of which has garnered over 2500 views since. I am slated to **co-present a tutorial** on crowdsourcing for benchmark data collection at EMNLP 2021. Additionally, I am **co-organizing a workshop** on NLP for positive social impact, which was accepted to ACL 2021. Finally, I have **created several widely used commonsense knowledge graphs and benchmarks** including ATOMIC [154 citations to date; 1], SOCIAL IQA [64 citations; 2]. The SOCIAL IQA benchmark is also part of the DARPA Machine Commonsense leaderboard suite.

Policy & Press — **I have been interviewed by several journalists and qualitative researchers**. Notably, I shared my expertise on algorithmic bias with a Dutch legal researcher writing a legal brief which was accepted by the Dutch government. Additionally, I have participated in several studies by qualitative researchers in ethics of AI, conversational AI, and commonsense. Finally, my research has been covered in news outlets such as Forbes, GeekWire, Vox, and Fortune.

Outreach & DEI — I participated in several outreach efforts to encourage young students from all backgrounds to pursue computer science, including helping my department recruit students at the Tapia diversity in Computing conference. Additionally, in 2017 and 2018, I co-organized events to **teach K-12 and high school students about artificial intelligence** and to showcase my team's competition-winning chatbot.[1]

Future Plans

Looking forward, I plan to continue my efforts to help companies, non-profits, and other researchers implement the output of my research for their own purposes. Additionally, I plan to continue communicating my research to non-computer science audiences (e.g., journalists, legal scholars) and broadening participation in computer science through outreach efforts.

---

[1] https://www.cs.washington.edu/research/nlp/soundingboardevent

References

[1] **Maarten Sap**, Ronan LeBras, Emily Allaway, Chandra Bhagavatula, Nicholas Lourie, Hannah Rashkin, Brendan Roof, Noah A Smith, and Yejin Choi. ATOMIC: an atlas of machine commonsense for if-then reasoning. In *AAAI*, 2019.

[2] **Maarten Sap***, Hannah Rashkin*, Derek Chen, Ronan LeBras, and Yejin Choi. SOCIAL IQA: commonsense reasoning about social interactions. In *EMNLP*, 2019.

[3] Antoine Bosselut, Hannah Rashkin, **Maarten Sap**, Chaitanya Malaviya, Asli Celikyilmaz, and Yejin Choi. COMET: commonsense transformers for automatic knowledge graph construction. In *ACL*, 2019.

[4] Maxwell Forbes, Jena D. Hwang, Vered Shwartz, **Maarten Sap**, and Yejin Choi. Social chemistry 101: Learning to reason about social and moral norms. In *EMNLP*, 2020.

[5] **Maarten Sap**, Eric Horvitz, Yejin Choi, Noah A Smith, and James W Pennebaker. Recollection versus imagination: Exploring human memory and cognition via neural language models. In *ACL*, 2020.

[6] **Maarten Sap**, Marcella Cindy Prasetio, Ari Holtzman, Hannah Rashkin, and Yejin Choi. Connotation frames of power and agency in modern films. In *EMNLP*, 2017.

[7] **Maarten Sap**, Saadia Gabriel, Lianhui Qin, Dan Jurafsky, Noah A Smith, and Yejin Choi. SOCIAL BIAS FRAMES: Reasoning about social and power implications of language. In *ACL*, 2020.

[8] **Maarten Sap**, Vered Shwartz, Antoine Bosselut, Yejin Choi, and Dan Roth. Commonsense reasoning for natural language processing. In *ACL tutorials*, pages 27–33, Online, July 2020. Association for Computational Linguistics.