

Preface

Motivation for the Book

In observing the numerous discussions about the rapid advancement of artificial intelligence (AI), it is clear that while there is a lot of sharing of ideas, true collaboration, challenging of concepts, and alignment is rare. We still operate in silos. Given the critical, pervasive, and revolutionary nature of AI, it is critical that we move forward carefully, holistically, and collaboratively to ensure that our decisions and progress are deliberate and well-considered.

Now is not the time to rush. With a technology as significant and transformative as AI, it is important to pause and reflect on our actions, motivations, and methods. It is equally important to understand the roles and intentions of the various players to grasp the potential impacts and influences of these simultaneous developments.

At present, it appears that no one, not even the experts, fully understands the unfolding events and their future implications. We are in danger of outpacing ourselves, our understanding, and engaging in a kind of technological arms race that has become incomprehensible and risks to get out of control.

This book presents 30 interdisciplinary dialogues on artificial intelligence, all derived from the same semi-structured interview format. These interviews were conducted with the goal of uncovering opportunities for collaboration, identifying gaps, and exploring the multiple meanings and perceptions attached to commonly used terms in the field of AI.

Our concern for our current era is profound, especially given our lack of preparedness for the complexity, interconnectedness, and pace of progress. The challenges we face with AI are unprecedented in scope and impact, yet many fail to recognize the magnitude.

This book serves as a call to action and collaboration, reminding us of our collective responsibility to (consciously) shape the future. Its purpose is not to scare, but to raise awareness of the importance of establishing guidelines for responsible progress in these pivotal times. We are not predicting an inevitable dystopian future; instead, we are sounding the alarm to encourage a collective effort to identify, establish, and address the boundaries we must not cross. This way ensuring that we maintain control over technological progress, technological autonomy, and its impact on society.

Approach Towards this LNCS Volume

The AISoLA conference brought together experts from various fields to discuss advances in artificial intelligence and explore collaborative approaches to its future development. Prior to attending the conference, it was planned to conduct semi-structured interviews with the interdisciplinary experts in attendance. Inspired by the first few days of presentations, Maximilian Schlüter and I (Barbara) created an interview guide to structure these conversations.

I seized this unique opportunity to engage with a wide range of specialists, arranging 23 interviews over the course of five days. These face-to-face interviews, which were filmed and recorded, ranged in length from 15 to 50 minutes.

To enrich the range of insights, I later conducted five additional interviews online, expanding the dialogue beyond the AISoLA participants. Recognizing the importance of including AI perspectives in this discourse, I also included contributions from Inflection AI's Pi and OpenAI's ChatGPT. This serves two purposes. First, it helps us reflect on the level of sophistication of today's AI systems, and second, how could this be a book about AI without letting AI speak for itself?

The Intention and Lever of the Profiles of the Authors

Experts already involved in such highly interdisciplinary collaborations stressed the importance and challenges of bridging different vocabularies, mindsets, and mental models in order to overcome so-called semantic barriers. Therefore, to put the replies of the interviews in context, we asked the interviewees to fill out a profile which now acts as the title page of each interview.

The Cover

When the idea of AISoLA started a year and a half ago, our goal was to create a cover that would symbolize the future relationship between humans and AI. After several iterations by Gerrit Nolte using DALL-E, the final cover design emerged. At first glance, it appears harmless, calm, and peaceful, but upon closer inspection, it evoked a sense of unease in some - a reaction we found particularly telling. This duality of perception made it the perfect symbol for AISoLA and our Let's Talk AI initiative. It beautifully captures the spectrum of opinions, emotions, and intuitions possible, despite us all looking at the same thing.

Writing and Reviewing Process

The audio and videotaped interviews were transcribed using AI, resulting in both raw and AI-enhanced versions of the transcripts. Interviewees were given the flexibility to select, merge, edit, and submit their preferred versions for inclusion in this volume. They were also asked to complete a profile and provide references to maintain scientific integrity.

Submissions were reviewed by at least two individuals, including the interviewees and AI enthusiasts like Dennis Dams, Gerrit Nolte, and Maximilian Schlüter. This included checking for completeness and clarity, adequacy of references, potential for additional references, and identifying key messages to highlight.

Authors received their reviews and were asked to submit their final versions. We then standardized all interviews into a coherent format before submitting it to Springer for publication.

Acknowledgement

This project, from its inception to its completion, has been a collaborative journey enriched by the contributions of many, and it is with deep gratitude that we express our thanks to each of them.

To all of the interviewees, we are immensely grateful not only for your time and insights, but also for your extraordinary efforts to turn our conversations into comprehensive papers. Your willingness to dig deep and share your expertise was the cornerstone of this project.

We are very grateful to the Springer team. To Ronan Nugent for his enthusiastic support and for embracing the vision of turning these interviews into an LNCS volume, a significant milestone in our journey. And to Jonas Spies, whose enthusiasm and commitment were crucial. By converting all audio and video files into transcripts and offering AI-adapted versions of each, he greatly enhanced the accessibility and utility of our materials, allowing respondents to choose their preferred versions for refinement and publication.

We would also like to thank Maximilian Schlüter for his invaluable collaboration in shaping the semi-structured interview guide that served as the foundation for our explorations, Tim Tegeler, whose filming and technical support at AISoLA was indispensable in ensuring that the interviews were captured in the necessary quality, Dominic Wirkner for his expert advice and for providing the essential technical resources that made this ambitious project possible, Steven Smyth for his role in developing the AISoLA survey, which added a valuable dimension to our research, Mira Eugene Schwartz for transferring all interviews into a standardized format, and Julia Rehder for enthusiastic conversations, reviews, and suggestions of additional interview candidates. Finally, we are very grateful to the Center for Trustworthy Data Science and Security RC-Trust, the Lamarr Institute for Machine Learning and Artificial Intelligence, and MetaFrame Technologies for their support in finalizing this volume.

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