Information fusion deals with reconstructing objects from multiple, possibly incomplete and inconsistent observations. The task of scalable information fusion is critical for interdisciplinary research where a comprehensive picture of the subject requires large amounts of data from disparate data sources. Despite its increasing availability, making sense of such data is not trivial. In this talk I will elaborate on challenges in developing an infrastructure that facilitates scalable information integration and fusion. I will introduce an efficient framework that enables systematic information fusion in the context of remotely related application domains and disciplines. In particular, I will consider how concepts of information fusion and crowdsourcing complement each other and accelerate novel research directions in scalable information sensemaking. I will explore each of those concepts and their synergy under prominent scenarios of large-scale historical data integration and situation assessment in multi-robot search and rescue.

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