In the age of digital transformation, complex information and data is becoming ubiquitous. In this talk, I introduce and illustrate the conceptual framework of computational sensemaking for "making sense" of such heterogeneous and complex data in ubiquitous and social environments. Exemplary contexts include e.g., ubiquitous social media, the internet of things, and smart production/industry 4.0. The talk presents according methods from data science, complex network analysis, and artificial intelligence. Also, it outlines the relation to big data in ubiquitous and social environments; here, it focuses on the investigation of interactions, structure and semantics, as well as the detection of interesting patterns, for extracting meaningful insights from large amounts of heterogeneous data, and for fostering interpretation and analysis, in order to support decision making. This leads to augmenting human
intelligence and to assist the involved actors in all their purposes, both online and in the physical world.