Work is an important part of our lives. It is not only a way to earn a living, but a crucial source for experiencing meaningfulness in everyday life. Meaning in work can stem from various sources: being successful at the job, mastering interesting challenges, having good relationships with colleagues, and feeling proud to contribute and to be a crucial part of an organization. Work has always been mediated by technology, from early hand tools to the now ubiquitous computer. However, these tools were largely passive extensions of the body and the mind of a working person, an extension of the self.

The progress in adaptive automation, and the rise of robots and in the widest sense artificial intelligence-based systems will change the way we work. The computational artefacts become counterparts with their own (limited) agency, unpredictability and opacity. Consequently, this will impact the perception of work meaningfulness and job satisfaction on both individual and societal levels. Interestingly, most research on designing AI-based technologies focused on performance-related aspects, such as the efficiency and effectiveness of human-AI systems. Furthermore, due to the limitations of the existing AI-based technologies, these studies mainly address the interaction with blue collar (manual) workers. However, progress in AI will also affect work practices of people entitled as white collar (knowledge), pink collar (service provider), and even no collar (artists) workers.

In this Dagstuhl seminar, we addressed and discussed these gaps raising the questions of how can the design of future AI-based technology maintain or even enhance job meaningfulness in different domains of work, and how can we ensure meaningfulness besides aiming for effectiveness and efficiency.