

# What Shall We Do Next?

## The Challenges of AI Midway through Its First Century

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**Abstract.** After half a century of productive work, let us pause to consider what to do next. Looking back we see that Turing's Test was a destination without a map, a goal without a methodology. We see three major, gradual retreats from AI's original goals—general intelligence, knowledge-based intelligence, and problem solving. We see the fragmentation of AI into sub-disciplines and growing uncertainty about who we are and what we want to accomplish. Yet I am optimistic: With an informed understanding of our past we can design and run large-scale, goal-directed research programs—as other organized sciences do—and if we do so with vision and discipline we may yet see Turing's Test passed—and our understanding of intelligence dramatically increased – before the end of our first century. This is already happening in several areas of AI, as I will illustrate in my talk.