

Using Information Theory to Observe Natural Intelligence and Artificial Intelligence

Authors : Lipeng Zhang, Limei Li, Yanming Pearl Zhang

Abstract : This paper takes a philosophical view as axiom, and reveals the relationship between information theory and Natural Intelligence and Artificial Intelligence under real world conditions. This paper also derives the relationship between natural intelligence and nature. According to communication principle of information theory, Natural Intelligence can be divided into real part and virtual part. Based on information theory principle that Information does not increase, the restriction mechanism of Natural Intelligence creativity is conducted. The restriction mechanism of creativity reveals the limit of natural intelligence and artificial intelligence. The paper provides a new angle to observe natural intelligence and artificial intelligence.

Keywords : natural intelligence, artificial intelligence, creativity, information theory, restriction of creativity