1. Record Nr. UNISA996546837903316 Autore Xu Jianfeng Titolo Objective Information Theory [[electronic resource] /] / by Jianfeng Xu, Shuliang Wang, Zhenyu Liu, Yashi Wang, Yingfei Wang, Yingxu Dang Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa 981-19-9929-5 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (XI, 97 p. 1 illus.) Collana SpringerBriefs in Computer Science, , 2191-5776 Disciplina 005.7 Soggetti Information modeling Artificial intelligence - Data processing Computer science Artificial intelligence Information Model **Data Science** Computer Science Intelligence Infrastructure Theory of Computation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Information Theory on Change to Reflection -- Chapter 2. Recognizing Objective Information. Chapter 3. Modelling Objective Information: Sextuple -- Chapter 4. Measuring Objective Information -- Chapter 5. Exemplifying Objective Information: Air Traffic Control System -- Chapter 6. Exemplifying Objective Information Theory: Smart Court. Sommario/riassunto Objective Information Theory (OIT) is proposed to represent and compute the information in a large-scale complex information system with big data in this monograph. To formally analyze, design, develop, and evaluate the information, OIT interprets the information from essential nature, measures the information from mathematical properties, and models the information from concept, logic, and

physic. As the exemplified applications, Air Traffic Control System (ATCS) and Smart Court SoSs (System of Systems) are introduced for

practical OITs. This Open Access book can be used as a technical reference book in the field of information science and also a reference textbook for senior students and graduate ones in related majors.