Record Nr. UNINA9910299278003321 Autore Reynolds Robert G Titolo Culture on the Edge of Chaos: Cultural Algorithms and the Foundations of Social Intelligence / / by Robert G. Reynolds Cham: .: Springer International Publishing: .: Imprint: Springer. . Pubbl/distr/stampa 2018 **ISBN** 3-319-74171-3 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (VIII, 108 p. 67 illus., 52 illus. in color.) Collana SpringerBriefs in Computer Science, , 2191-5768 006.3 Disciplina Soggetti Artificial intelligence Computational intelligence Application software Social sciences—Data processing Social sciences—Computer programs Artificial Intelligence Computational Intelligence Computer Appl. in Social and Behavioral Sciences Computational Social Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The Cultural Algorithm: Culture on the Edge of Chaos -- Cultural Nota di contenuto Algorithm Framework -- Modeling the Social Fabric -- Generating Chaos -- Social Metrics -- The Cultural Engine: Putting Individuals to Work -- Comparing Nuclear Family and Extended Family Organizations -- Comparison of Lineage Based Subculture Social Organization Performance -- Conclusions -- References. Sommario/riassunto The author first introduces the basic framework for cultural algorithms and he then explains the social structure of a cultural system as a mechanism for the distribution of problem-solving information throughout a population. Three different models for social organizations are presented: the homogeneous (nuclear family), heterogeneous (expanded family), and subculture (descent groups) social models. The chapters that follow compare the learning

capabilities of these social organizations relative to problems of varying

complexity. The book concludes with a discussion of how the results can impact our understanding of social evolution.