Record Nr. UNINA9910483447803321 Engineering self-organising systems: third international workshop, **Titolo** ESOA 2005, Utrecht, The Netherlands, July 25, 2005: revised selected papers / / Sven A. Brueckner ... [et al.] (eds.) Berlin; New York, : Springer, 2006 Pubbl/distr/stampa **ISBN** 3-540-33352-5 Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (XII, 248 p.) LNCS sublibrary. SL 7, Artificial intelligence Collana Lecture notes in artificial intelligence, , 0302-9743 ; ; 3910 Altri autori (Persone) BruecknerSven A 006.3 Disciplina Soggetti Self-organizing systems Evolutionary programming (Computer science) **Evolutionary computation** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and author index. pt. 1. Self-organising mechanisms -- pt. 2. Methodologies, models and Nota di contenuto tools -- pt. 3. Applications. Sommario/riassunto The idea that self-organisation and emergence can be harnessed for the purpose of solving tricky engineering problems is becoming increasingly accepted. - searchers working in many diverse ?elds (such as networks, distributed systems, operating systems and agent systems) are beginning to apply this new approach. This book contains recent work from a broad range of areas with the common theme of utilising self-organisation productively. As distributed information infrastructures continue to spread (such as the Internet, wireless and mobile systems), new challenges have arisen demanding robust and scalable solutions. In these new challenging environments the - signers and engineers of global applications and services can seldom rely on centralised control or management, high reliability of devices, or secure en- ronments. At the other end of the scale, ad-hoc sensor networks and ubiquitous computing devices are making it possible to embed millions of smart computing agents into the local environment. Here too systems need to adapt to constant failures and replacement of

agents and changes in the environment, without human intervention or