

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910438059203321 |
| Titolo | Control of Cyber-Physical Systems : Workshop held at Johns Hopkins University, March 2013 // edited by Danielle C. Tarraf |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2013 |
| ISBN | 3-319-01159-6 |
| Edizione | [1st ed. 2013.] |
| Descrizione fisica | 1 online resource (XII, 380 p. 124 illus.) |
| Collana | Lecture Notes in Control and Information Sciences, , 0170-8643 ; ; 449 |
| Disciplina | 629.8/312 |
| Soggetti | Control engineering System theory Control and Systems Theory Systems Theory, Control |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "This volume brings together 19 invited papers presented at the Workshop on Control of Cyber-Physical Systems held at The Johns Hopkins University in Baltimore, USA on March 20-21, 2013"--Preface. |
| Nota di bibliografia | Includes bibliographical references and author index. Includes bibliographical references. |
| Nota di contenuto | Paradigms for CPS Analysis and Design -- Foundations of Cyber-security -- Cyber-security of Networked Systems -- Fault Diagnosis and Sensor Fusion in CPS -- Application Domains: Robotics & Power Systems -- Control of Multi-Agent Systems. |
| Sommario/riassunto | Cyber-physical systems (CPS) involve deeply integrated, tightly coupled computational and physical components. These systems, spanning multiple scientific and technological domains, are highly complex and pose several fundamental challenges. They are also critically important to society's advancement and security. The design and deployment of the adaptable, reliable CPS of tomorrow requires the development of a basic science foundation, synergistically drawing on various branches of engineering, mathematics, computer science, and domain specific knowledge. This book brings together 19 invited papers presented at the Workshop on Control of Cyber-Physical Systems, hosted by the Department of Electrical & Computer Engineering at The Johns Hopkins University in March 2013. It highlights the central role of control theory and systems thinking in developing the theory of CPS, in addressing the |

challenges of cyber-trust and cyber-security, and in advancing emerging cyber-physical applications ranging from smart grids to smart buildings, cars and robotic systems. .
