1. Record Nr. UNINA9910791012603321

Autore	Fry Earl H.
Titolo	Revitalizing governance, restoring prosperity, and restructuring foreign affairs : the pathway to renaissance America / / Earl H. Fry
Pubbl/distr/stampa	Lanham, Maryland : , : Lexington Books, , 2014 ©2014
ISBN	0-7391-9748-7 0-7391-9747-9
Descrizione fisica	1 online resource (291 p.)
Disciplina	350.000973
Soggetti	Bureaucracy - United States - History Bureaucracy - United States United States Foreign relations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Acknowledgements; Preface; Chapter 1: America's Quest to Remain a Superpower and to Provide an Exceptional Quality of Life for Its Citizens; Chapter 2: America on the Brink-Corrosive Government Practices in "Versailles on the Potomac"; Chapter 3: The Erratic Efforts of the U.S. Federal System to Cope with Entitlements and Health Care; Chapter 4: The American Dream in Question: Major Societal Cleavages; Chapter 5: In Search of aCoherent Foreign and Defense Policy Chapter 6: Upward or Downward Trajectory? The U.S. in the Uncharted Waters of Globalization, Technology Change, and Creative DestructionChapter 7: Solutions to Governance Problems; Chapter 8: Leveraging U.S. Strengths to Enhance National Competitiveness and the Individual's Quality of Life; Chapter 9: Life in Renaissance America and the World Surrounding It, 2030; Notes; Bibliography; Index; About the Author
Sommario/riassunto	This book details fifteen debilitating fault lines facing the United States, ranging from Beltway dysfunction, to incoherent foreign policy pursuits. It then offers specific policy solutions, based on best practices, which will erase these fault lines and permit the United States to enter a new era of "Renaissance America" by 2030.

2.

Record Nr.	UNINA9910842496703321
Autore	Forster Anna
Titolo	Opportunistic Networks : Concepts and Systems / / by Anna Förster, Pietro Manzoni, Enrique Hernández Orallo, Koojana Kuladinithi, Asanga Udugama
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-47866-5
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (201 pages)
Altri autori (Persone)	ManzoniPietro Hernandez OralloEnrique KuladinithiKoojana UdugamaAsanga
Disciplina	004.6
Soggetti	Computer networks Wireless communication systems Mobile communication systems Telecommunication Computer Communication Networks Wireless and Mobile Communication Communications Engineering, Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	I Foundations of Opportunistic Networks -- 1 Mobility of Opportunistic Networks -- 1.1 Scale and density -- 1.2 Collecting mobility traces -- 1.3 From mobility traces to location information -- 1.4 From mobility traces to contact information -- 1.4.1 Converting GPS traces into contact traces -- 1.4.2 Direct gathering of contact traces -- 1.5 Mobility metrics -- 1.6 Large-Scale Mobility Characteristics in OppNets -- 1.7 Impact of mobility on opportunistic networks -- 1.8 Chapter summary -- Problems -- 2 Data Dissemination in Opportunstic Networks -- 2.1 Terms and metrics -- 2.2 Optimal dissemination --

2.3 Flooding protocols -- 2.3.1 Epidemic Routing -- 2.3.2 Spray and Wait -- 2.3.3 Optimal Stopping Theory -- 2.4 Mobility based protocols -- 2.4.1 Geocasting protocols -- 2.4.2 Speed/direction based protocols -- 2.4.3 Encounter based protocols -- 2.5 Social awareness based protocols -- 2.6 Data content based protocols -- 2.7 Network coding based protocols -- 2.8 Caching in Opportunistic Networks -- 2.9 Chapter summary -- Problems -- 3 Security in Opportunistic Networks -- 3.1 Overview -- 3.2 Types of Attacks -- 3.2.1 Masquerade -- 3.2.2 Eavesdropping . -- 3.2.3 Sabotage -- 3.2.4 Data Manipulation -- 3.2.5 Physical Attacks -- 3.2.6 Free-riding -- 3.3 Attacks Evaluation -- 3.3.1 Evaluation Methodology and Setup -- 3.3.2 Effects of the Attacks -- 3.4 Chapter summary -- Problems -- Part II Evaluation of Opportunistic Networks 4 Overview of Evaluation of Opportunistic Networks -- 4.1 Overview -- 4.2 Methods for evaluating Opportunistic Networks -- 4.3 Metrics for evaluating Opportunistic Networks -- 4.4 Chapter summary -- Problems -- 5 Theoretical Models for Opportunistic Networks -- 5.1 General assumptions and their validity -- 5.2 Markov Chain Models -- 5.2.1 Modeling epidemic diffusion in OppNet -- 5.2.2 Limitations and applications of Markov Chain Models -- 5.3 Compartmental models -- 5.3.1 Basic epidemic model -- 5.3.2 Epidemic model for an open area -- 5.3.3 Limitations and applicationsof Compartmental Models -- 5.4 Other methods -- 5.5 Chapter summary -- Problems -- 6 Simulation models for Opportunistic Networks -- 6.1 Simulation model stack for opportunistic networks -- 6.4 Mobility Models and Contact Traces -- 6.4.1 Terminology -- 6.4.2 Properties of mobility models -- 6.4.3 Contact traces -- 6.4.4 Discussion of mobility models -- 6.5 Simulation Speedup -- 6.6 Chapter summary -- Problems -- 7 Simulation tools for Opportunistic Networks -- 7.1 Discrete event-based simulation -- 7.2 OMNeT++ and the Opportunistic Network Simulator (OPS) -- 7.3 The ONE -- 7.4 Network Simulator 3 (ns-3) -- 7.5 Comparison of simulators -- 7.6 Mobility tools -- 7.7 Chapter summary -- Problems -- 8 Benchmarking Opportunistic Networks -- 8.1 Benchmarks for OppNets -- 8.2 Metrics for comparing opportunistic protocols -- 8.3 Comparing opportunistic protocols -- 8.4 Chapter summary -- Problems -- Part III Implementation of Opportunistic Networks 9 Connectivity Technologies for OpportunisticNetworks -- 9.1 Mobile Ad Hoc Networks -- 9.2 Communication Technologies -- 9.2.1 LoRa -- 9.2.2 Radio Frequency Identification (RFID) -- 9.2.3 Bluetooth Low Energy (BLE) -- 9.2.4 Wi-Fi Direct -- 9.2.5 ZigBee -- 9.2.6 802.11p -- 9.2.7 Satellite communication -- 9.3 Toward 5G and 6G Networks -- 9.4 Related software and libraries -- 9.4.1 Exposure Notifications System (ENS) -- 9.4.2 Apple Multipeer Connectivity.

Sommario/riassunto

This textbook provides an exhaustive exploration of Opportunistic Networks (OppNets). Divided into three parts, it starts with the foundational principles and metrics of OppNets, detailing their mobility and data dissemination. Significant focus is given to the security challenges faced by OppNets, including strategies to counter various attacks. The second part evaluates OppNets, introducing methods and metrics for assessment, theoretical and simulation models, and tools such as OMNeT++, The ONE and ns-3. This textbook also offers comparative analyses and discussions on benchmarking. The third part delves into the implementation of OppNets, discussing technologies from Mobile Ad Hoc Networks to satellite communication and their integration with cellular technologies like 4G, 5G and 6G. Detailed insight into device characterization reveals the potential and limitations of devices within OppNets. Practical applications of OppNets in

scenarios such as disaster management, remote communication, IoT challenges, smart cities and satellite networks are presented as well. Through detailed discussions and case studies, readers gain a comprehensive understanding of the structure, operation and practical implications of OppNets. It equips readers with knowledge to appreciate the vast potential of OppNets in various applications and settings. This textbook targets advanced-level students and postdocs in computer science and electrical engineering as well as researchers, who are starting new in the area and need a comprehensive view of opportunistic networks. Practitioners who are interested in applying the concepts of opportunistic networks in their products and services, and would like to have a jump start into the development and applications of opportunistic networks will also want to purchase this book as a reference.