

1. Record Nr.	UNISA996385341203316
Autore	Parker Samuel <1640-1688.>
Titolo	Reasons for abrogating the test imposed upon all members of Parliament, anno 1678, Octob. 30 [[electronic resource] ] : in these words, I A.B. do solemnly and sincerely, in the presence of God, profess, testifie, and declare, that I do believe that in the Sacrament of the Lord's Supper there is not any transubstantiation of the elements of bread and wine into the body and blood of Christ, at, or after the consecration thereof by any person whatsoever, and that the invocation or adoration of the Virgin Mary, or any other saint, and the sacrifice of the mass, as they are now used in the Church of Rome, are superstitious and idolatrous : first written for the author's own satisfaction, and now published for the benefit of all others whom it may concern
Pubbl/distr/stampa	London, : Printed for Henry Bonwicke ..., 1688
Descrizione fisica	[3], 135 p
Soggetti	Great Britain Politics and government 1660-1688
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Marginal notes. Signed: Sa. Oxon. Reproduction of original in Huntington Library.
Sommario/riassunto	eebo-0113

2. Record Nr.	UNINA9910522917403321
Autore	Klymash Mikhailo
Titolo	Future Intent-Based Networking : On the QoS Robust and Energy Efficient Heterogeneous Software Defined Networks // edited by Mikhailo Klymash, Mykola Beshley, Andriy Luntovskyy
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-030-92435-1
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (531 pages)
Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 831
Disciplina	006.3
Soggetti	Electrical engineering Computational intelligence Electrical and Electronic Engineering Computational Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Introduction -- Acknowledgment -- Contents -- Future Intent-Based Networking for QoE-Driven Business Models -- 1 Introduction -- 2 Intent-Based Networking for Adaptive Business Process Management -- 3 Future Insights of QoE Based Network Management -- 4 Conclusion -- References -- Designing HDS Under Considering of QoS Robustness and Security for Heterogeneous IBN -- 1 Motivation and Introduction: HDS for IBN -- 2 Designing HDS -- 2.1 Distributed Systems -- 2.2 Highly-Distributed Systems -- 2.3 HDS Construction Paradigms 1-4 -- 2.4 Demarcation of Web Services and Micro-services -- 2.5 Three Main Questions -- 3 Service Composition in Highly-Distributed Systems -- 4 Considering of QoS Robustness and Security -- 4.1 QoS Robustness and QoE -- 4.2 CIDN for IBN -- 5 Summarizing -- 6 Conclusions and Outlook -- References -- Intent-Based Placement of Microservices in Computing Continuums -- 1 Introduction -- 2 Placement, Migration and Other Software Engineering Concerns -- 3 Matchmaking as Planning Phase for Initial Placement -- 3.1 Example Description -- 3.2 Preliminaries: Definitions and Models -- 3.3 Greedy Matching -- 3.4 Rule-Based Matching -- 3.5 SAT Solver Matching -- 3.6 Towards Advanced Intent-Based Matching

and Placement -- 4 Conclusion -- References -- Infrastructure as Code and Microservices for Intent-Based Cloud Networking -- 1 Introduction -- 2 AIOps and Benefits of Infrastructure as Code -- 3 GCP Cloud Functions for Microservices -- 4 GCP Cloud Run - Highly Scalable Containerized Applications -- 5 Conclusion -- References -- Intent-Based Adaptation Coordination of Highly Decentralized Networked Self-adaptive Systems -- 1 Introduction -- 2 Application Scenario -- 3 Intent-Based Self-adaptation with Roles -- 3.1 The MAPE-K Control Loop -- 3.2 Patterns for Decentralization in Control Loops -- 3.3 Foundations of Roles. 3.4 The Compartment Role Object Model (CROM) -- 3.5 Scala Roles Language (SCROLL) -- 3.6 Modelling Runtime Adaptations -- 3.7 Conceptual Framework for Intent-Based Adaptation Coordination -- 4 Case Study -- 4.1 Monitoring Component -- 4.2 Analysis and Planning -- 4.3 Decentralized Execution of Adaptation Plans -- 5 Conclusion and Future Work -- References -- Intent-Based Routing in Delay- and Disruption-Tolerant Networks -- 1 Introduction -- 2 Foundations -- 2.1 Delay-/Disruption-Tolerant Networking -- 2.2 Intent-Based Networking -- 2.3 Self-Adaptive Systems -- 3 Toward an Intent-Based DTN -- 3.1 Example Scenario -- 3.2 An Intent-Based Networking Approach for DTN -- 3.3 Self-Adaptation Concepts for Intent-Based DTN -- 3.4 Open Issues for Intent-Based DTN -- 4 Adaptive DTN Routing -- 4.1 Contact Prediction-Based DTN Routing -- 4.2 Adaptation of the Routing Algorithm -- 4.3 Application to Example Scenario -- 5 A Multicast Approach for Intent-Based Node Configuration -- 5.1 Multicast in Deterministic DTN -- 5.2 SPSN-Based Multicast -- 5.3 Application to Example Scenario -- 6 Future Research Directions -- 7 Conclusion -- References -- QoE-Oriented Routing Model for the Future Intent-Based Networking -- 1 Introduction -- 2 QoE-Aware Intent-Based Networking Architecture -- 3 The QoE Video Streaming Evaluation Method Through the QoS/QoE Correlation Model -- 4 Intent-Based Software-Defined Network Testbed with QoE-Aware Routing Realization -- 5 Conclusion -- References -- Complex Investigation of the Compromise Probability Behavior in Traffic Engineering Oriented Secure Routing Model in Software-Defined Networks -- 1 Introduction -- 2 Traffic Engineering Oriented Secure Routing Model -- 3 Link Blocking Models in Secure Based Traffic Engineering -- 4 Numerical Research of Secure Based Traffic Engineering Model on SDN Data Plane -- 5 Conclusion -- References. Intelligent Traffic Engineering for Future Intent-Based Software-Defined Transport Network -- 1 Introduction -- 2 Intent-Based Software-defined Transport Network Architecture Based on Neural Networks and Machine Learning -- 3 IBSDTN State Detection Algorithm Based on ML K-Means and C-Means -- 4 An Intelligent Traffic Engineering Method Based on Graph Neural Networks for IBSDTN -- 5 The Development of IBSDTN Simulation Model -- 6 Simulation Results -- 7 Conclusion -- References -- The Approach to Flow Management in Virtual Computational Environment for Up-to-Day Telecom Networks -- 1 Introduction -- 2 Description of Processes in SDN Controller -- 3 Statement of the Research Task. Method of Organizing Functions "Infinity Train" -- 4 Ensuring the Sufficiency of the Resources at All Times -- 5 The Specifics of Creating Virtual Machines in Dynamic Mode and the Technologies for Their Implementation -- 6 Description of the Experiment -- 7 Conclusions -- References -- Calculation of Quality Indicators of the Future Multiservice Network -- 1 Introduction -- 1.1 Analysis of the Quality of the Multiservice Network -- 2 Statement of Research Problem -- 2.1 Evaluation of the Quality Indicators of the Multiservice Network -- 3 Conclusions -- References

-- Intelligent Detection of DDoS Attacks in SDN Networks -- 1  
Introduction -- 2 Concept of Intelligent Detection of DDoS Attacks  
in SDN Networks Using Machine Learning -- 2.1 General Concept --  
2.2 The Principle of Log Analysis -- 3 Implementation of Protection  
from DDoS Attacks Based on Analysis of the Service Information -- 3.1  
Web Applications Security Monitoring Using Log Analysis Subsystem --  
3.2 Attack Detection Using Kulbak-Leibler Approach -- 3.3 Machine  
Learning and Attack Detection -- 4 Conclusion -- References.

Mathematical Methods of Reliability Analysis of the Network Structures:  
Securing QoS on Hyperconverged Networks for Traffic Anomalies -- 1  
Introduction -- 1.1 Motivation -- 1.2 Analysis of Related Works -- 1.3  
Goals and Structure -- 2 Statistical Characteristics of Hyperconverged  
Network Traffic -- 3 Defining the Limits of cChanges in Traffic  
Properties -- 4 Mathematical Model of Abnormal Traffic  
in a Hyperconverged Network -- 5 Discussion -- 6 Conclusion --  
References -- Parametric Analysis of Statistical and Correlation  
Characteristics of Discrete Processes in Dynamic Systems with Non-  
stationary Nonlinearities in Time for the Secure Intent-Based Networks  
-- 1 Introduction -- 2 Algorithms for Generating Random-Like  
Processes -- 3 Estimation of Statistical and Spectral-Temporal  
Characteristics of Processes Formed by a System with Two Degrees  
of Freedom -- 3.1 Statistical Indicators of the Generated Process  
Quality -- 3.2 Correlation Properties of the Generated Process -- 4  
Estimation of Statistical and Temporal Characteristics of Processes  
Formed by a System with Three Degrees of Freedom -- 4.1 Statistical  
Indicators of the Quality of the Generated Process -- 4.2 Correlation  
Properties of the Generated Process -- 5 Conclusions and Practical  
Recommendations -- References -- Methodology of ISMS  
Establishment Against Modern Cybersecurity Threats -- 1 Introduction  
-- 2 Analysis of Attack Vectors -- 3 Analysis of Cybersecurity  
Frameworks -- 4 Educational Roadmap for Cyber Security Specialists --  
5 ISMS Implementation Model -- 6 Conclusion -- References -- QoE  
Estimation Methodology for 5G Use Cases -- 1 Introduction -- 2  
Previous Research Analysis -- 3 Problem Statement -- 4 QoE-QoS  
Estimation Methodology for the 5G Use Cases -- 4.1 5G Use Cases  
Classification -- 4.2 QoE Estimation Methodology -- 4.3 QoE  
Estimation Methodology Implementation.

5 Conclusions -- References -- Software Implementation Research  
of Self-similar Traffic Characteristics of Mobile Communication  
Networks -- 1 Introduction -- 2 The Self-similar Traffic in Mobile  
Networks -- 2.1 Research of Quality Characteristics of Self-similar  
Traffic -- 3 Practical Recommendations for Using the Results  
of Research Quality Characteristics in Mobile Networks -- 4  
Conclusions -- References -- Universal Method of Multidimensional  
Signal Formation for Any Multiplicity of Modulation in 5G Mobile  
Network -- 1 Introduction -- 2 Analysis of the Literature Data  
and the Problem Statement -- 3 The Purpose and Objectives  
of the Study -- 4 Special Elements -- 5 Modeling a Multidimensional  
Information Transmission System Based on a Multidimensional Signal  
-- 6 Discussion of the Study Results of the Noise Immunity of 5G  
Mobile Networks Based on a Multidimensional Signal with Amplitude-  
Phase Difference Modulation -- 7 Conclusions -- References -- AI-  
Enabled Blockchain Framework for Dynamic Spectrum Management  
in Multi-operator 6G Networks -- 1 Introduction -- 2 Blockchain  
and AI-Empowered 6G Framework -- 3 Deep Learning-Based  
Intelligent Multi-operator Spectrum Management in 6G -- 4 Simulation  
Results and Performance Analysis of the AI-Based Spectrum  
Management Workflow -- 5 Conclusion -- References -- Estimation

of Energy Efficiency and Quality of Service in Cloud Realizations  
of Parallel Computing Algorithms for IBN -- 1 Introduction  
and Motivation -- 2 QoS Control for IBN and Algorithm Parallelization  
Under Use of Matrix Approach -- 2.1 Arithmetic-Logic Relations  
and Recurrent Matrixes -- 2.2 Estimation of the Level of Algorithm  
Parallelization by Analyzing the Structure of Recurrent Matrixes -- 2.3  
Efficiency of Algorithm Parallelization for IBN Under Use of Standard  
Programming Techniques and Functions.  
2.4 QoS Control for IBN and Real-Time Capability.

---

## Sommario/riassunto

This text So-called Intent-Based Networking (IBN) is founded on well-known SDN (Software-Defined Networking) and represents one of the most important emerging network infrastructure opportunities. The IBN is the beginning of a new era in the history of networking, where the network itself translates business intentions into appropriate network configurations for all devices. This minimizes manual effort, provides an additional layer of network monitoring, and provides the ability to perform network analytics and take full advantage of machine learning. The centralized, software-defined solution provides process automation and proactive problem solving as well as centralized management of the network infrastructure. With software-based network management, many operations can be performed automatically using intelligent control algorithms (artificial intelligence and machine learning). As a result, network operation costs, application response times and energy consumption are reduced, network reliability and performance are improved, network security and flexibility are enhanced. This will be a benefit for existing networks as well as evolved LTE-based mobile networks, emerging Internet of Things (IoT), Cloud systems, and soon for the future 5G/6G networks. The future networks will reach a whole new level of self-awareness, self-configuration, self-optimization, self-recovery and self-protection. This volume consists of 28 chapters, based on recent research on IBN. The volume is a collection of the most important research for the future intent-based networking deployment provided by different groups of researchers from Ukraine, Germany, Slovak Republic, Switzerland, South Korea, China, Czech Republic, Poland, Brazil, Belarus and Israel. The authors of the chapters from this collection present in depth extended research results in their scientific fields. The presented contents are highly interesting while still being rather practically oriented and straightforward to understand. Herewith we would like to wish all our readers a lot of inspiration by studying of the volume! It will be replaced by the correct backcover text as soon as we get it. .

---