3.3 Examples of CAS

3.3.1 Natural CAS Example 1: CAS in Plants

3.3.2 Natural CAS Example 2: CAS in Social Systems

3.3.3 Artificial CAS Example 1: Complex Adaptive Communication Networks

3.3.4 Artificial CAS Example 2: Simulation of Flocking Boids

References

4 Modeling CAS

4.1 Agent-based Modeling and Agent-based Computing

4.1.1 Agent-oriented Programming

4.1.2 Multi-agent Oriented Programming

4.1.3 Agent-based or Massively Multiagent Modeling

4.1.4 Benefits of Agent-based Thinking

4.2 A Review of an Agent-based Tool

4.2.1 NetLogo Simulation: An Overview

4.3 Verification and Validation of Simulation Models

4.3.1 Overview

4.3.2 Verification and Validation of ABMs

4.3.3 Related Work on V&V of ABM

4.4 Overview of Communication Network Simulators

4.4.1 Simulation of WSNs

4.4.2 Simulation of P2P Networks

4.4.3 Simulation of Robotic Swarms

4.4.4 ABM for Complex Communication Networks Simulation

4.5 Complex Network Modeling

4.5.1 Complex Network Methods

4.5.2 Theoretical Basis

4.5.3 Centralities and Other Quantitative Measures

4.5.4 Centrality Measures

4.5.5 Software Tools for Complex Networks

4.6 Conclusions

References

Index
Cognitive Agent-based Computing-I
A Unified Framework for Modeling Complex Adaptive Systems using Agent-based & Complex Network-based Methods
Niazi, M.A.; Hussain, A.
2013, XIV, 55 p. 9 illus., 7 illus. in color., Softcover