

# Modeling And Simulation Formalisms

Architectural and Structural	— 31 (38.75%)
Systems Modeling Language (SysML)	— 13 (16.25%)
Unified Modeling Language (UML)	— 12 (15.00%)
Business Process Modeling (BPM)	— 3 (3.75%)
Building Information Modeling (BIM)	— 3 (3.75%)
Subject-Oriented Modeling (S-BPM)	— 2 (2.50%)
State Models	— 2 (2.50%)
Other	— 8 (10.00%)
Spatial and Visual Modeling	— 24 (30.00%)
Computer-Aided Design (CAD)	— 12 (15.00%)
3D Modeling	— 10 (12.50%)
Geometric Models	— 2 (2.50%)
Parametric Models	— 2 (2.50%)
Other	— 6 (7.50%)
Mathematical and Statistical	— 23 (28.75%)
Bayesian Networks (BN)	— 5 (6.25%)
General Mathematical Models	— 5 (6.25%)
Fuzzy Logic	— 2 (2.50%)
Model Reference Adaptive Control (MRAC)	— 2 (2.50%)
Other	— 18 (22.50%)
Ontological and Knowledge Representation	— 19 (23.75%)
Web Ontology Language (OWL)	— 7 (8.75%)
AutomationML	— 5 (6.25%)
Resource Description Framework (RDF)	— 3 (3.75%)
Property Graphs (PGs)	— 2 (2.50%)
Information Model	— 2 (2.50%)
Other	— 10 (12.50%)
Formal and State Based Methods	— 14 (17.50%)
Finite State Machines (FSM)	— 5 (6.25%)
Fault Tree Analysis (FTA)	— 3 (3.75%)
Other	— 7 (8.75%)
AI and Machine Learning	— 13 (16.25%)
Machine Learning	— 4 (5.00%)
Reinforcement Learning (RL)	— 2 (2.50%)
Genetic Algorithms (GA)	— 2 (2.50%)
Other	— 5 (6.25%)
Continuous Simulation	— 12 (15.00%)
System Dynamics Models (SDM)	— 4 (5.00%)
Kinematic Models	— 3 (3.75%)
General Physics Models	— 2 (2.50%)
Finite Element Method (FEM)	— 2 (2.50%)
Other	— 4 (5.00%)
Agent-Based Simulation	— 10 (12.50%)
Multi Agent System (MAS)	— 9 (11.25%)
Agent Based Modeling (ABM)	— 2 (2.50%)
Other	— 1 (1.25%)
Discrete-Event Simulation	— 8 (10.00%)
Discrete Event Simulation (DES)	— 4 (5.00%)
Discrete Event System Specification (DEVS)	— 2 (2.50%)
Other	— 3 (3.75%)