

## **Modeling and Simulation Body of Knowledge (M&SBOK) - Index**

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### **M&S: History**

(A timeline representation of the M&S history would also be useful.)

#### **Archives**

- [INFORMS](#) Simulation Society Archive
- [NCSU Libraries](#) Establishes New Simulation Archive (2005)
- [Simulation Council Newsletters](#) (1952-1963)

#### **Hardware**

##### **Analog Simulation**

##### **Device Simulation, Three-Dimensional**

- [History of Three-Dimensional Device Simulation](#)

##### **Digital Simulation**

- [ENIAC Simulation: History](#)

##### **Hybrid Simulation**

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#### **Software**

##### **Early Language Specifications and Their Critique**

##### **Languages**

- [Nance, R.](#) (1993). History of discrete event simulation programming languages
- [Breitenecker, F.](#) (2006). Software for Modelling and Simulation - History, Developments, Trends and Challenges

##### **Tools**

##### **M&S Environments - Conventional**

##### **M&S Environments - AI Support**

##### **M&S Environments - Agent Support**

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<b>Applications</b>	<p><b>Building</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Kusuda, T.</a> Early History and Future Prospects of Building System Simulation.</li> </ul> <p><b>Business</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Faria, A.J.</a> (2001). The Changing Nature of Business Simulation/ <b>Gaming</b>.</li> </ul> <p><b>Flight</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Aircraft Flight Simulation</a> (flight training)</li> <li>- <a href="#">Beginnings of Flight Simulation</a> (Edwin Link)</li> <li>- <a href="#">The History of Flight Simulation</a></li> </ul> <p><b>Fluid</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Fluid Simulations</a>: Past, Present &amp; Future</li> </ul> <p><b>Materials Modeling</b> (Computational Chemistry)</p> <ul style="list-style-type: none"> <li>- <a href="#">Materials Modeling &amp; Simulation History</a></li> </ul> <p><b>Medical</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Bradley, P.</a> (2006). The History of Simulation in Medical Education and Possible Future Directions</li> <li>- <a href="#">Patient Simulators</a></li> </ul> <p><b>Military</b></p> <ul style="list-style-type: none"> <li>-</li> </ul> <p><b>Social Science</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Social Science Computer Simulation</a>: Its History, Design, and Future</li> </ul> <p><b>Wargames</b></p> <ul style="list-style-type: none"> <li>- <a href="#">History of Wargames</a></li> </ul>
<b>Benchmark</b>	-
<b>Problems</b>	-
<b>Methods/ Techniques</b>	<p><b>Monte Carlo Method</b></p> <ul style="list-style-type: none"> <li>- <a href="#">History of Monte Carlo Method</a></li> </ul> <p><b>Synthetic Environments</b></p> <ul style="list-style-type: none"> <li>-</li> </ul> <p><b>Visualization</b></p> <ul style="list-style-type: none"> <li>- <a href="#">Bell, P.C. and R.M. O'Keefe</a> (1987). Visual Interactive Simulation - History, recent developments, and major issues</li> </ul>
<b>Conferences</b>	<p><b>SCSC</b> – Summer Computer Simulation Conference</p> <p><b>WSC</b> - Winter Simulation Conference</p>
<b>Pioneers</b>	<ul style="list-style-type: none"> <li>• involvement: 50+ years, 40+ years, 30+ years</li> </ul>
<b>Veterans</b>	<ul style="list-style-type: none"> <li>• involvement: 20+ years</li> </ul>
<b>Anecdotes</b>	-