

CSCE-675 Digital Libraries: Daily Readings

Krishna Y.Kamath (UIN: 119001316)

kykamath@cs.tamu.edu

Date: 5 April, 2011

I. STREAMS, STRUCTURES, SPACES, SCENARIOS, SOCIETIES (5S): A FORMAL MODEL FOR DIGITAL LIBRARIES [1]

Details:

- Year: 2004
- Type: ACM Trans. Inf. Syst
- Affiliations: Virginia Polytechnic Institute and State University

Take-away points:

- This paper gives formal models for digital libraries.
- The authors give fundamental abstractions of Streams, Structures, Spaces, Scenarios, and Societies (5S), which allows them to define digital libraries rigorously.
- The applicability, versatility, and unifying power of the 5S model are demonstrated through its use in three distinct applications: building and interpretation of a DL taxonomy, informal and formal analysis of case studies of digital libraries (NDLTD and OAI), and utilization as a formal basis for a DL description language.

REFERENCES

- [1] M. A. Gonçalves, E. A. Fox, L. T. Watson, and N. A. Kipp, "Streams, structures, spaces, scenarios, societies (5s): A formal model for digital libraries," *ACM Trans. Inf. Syst.*, vol. 22, pp. 270–312, April 2004. [Online]. Available: <http://doi.acm.org/10.1145/984321.984325>