

Faculty of Computer Science 2003-2004 Seminar Series

Automated Synthesis For Adaptive Hypermedia

By

Mehran Nadjarbashi-Noghani

Ph.d. Student, Faculty of Computer Science

Wednesday, March 17th, 2004 3:30 p.m. ITC317

Automated hypermedia synthesis is the process of hypermedia content generation from high-level description and data sources automatically. Automated synthesis facilitates the construction and maintenance of web sites and enables developers to cope with today's website construction challenges like frequent content update, diverse customer preferences, and short life cycles because of continual redesign, reliability assurance, and so forth.

Adaptive services are the current trend in design of web sites. Adaptive sites are those that adjust their content and structure automatically to provide individual users with personalized services that fit their needs and constraints better. The source of adaptation can be user behavior, technological specifications, and environmental restrictions.

Adaptation brings new challenges to the classical hypermedia synthesis problem. In addition to an automatic seamless code generation from high-level description, the synthesis process should be scalable and act in real time. The other problem is that how adaptation rules (the way a web site is adapted) should be specified in the high-level description and synthesized to lower-level system constraints.

The design of an efficient Intermediate Format plays a key role here. Intermediate Format sits between high-level description and generated browser-ready code, and is the representation of web site design in a middle-level format. In this seminar, after a tutor on the synthesis for adaptive hypermedia, the design of a model-based intermediate format will be presented.
