

## **RESEARCH**

### **Current Research**

IT-based space planning and visualization (sponsored by Microsoft and McGraw Hill)

Project management of high profile buildings: project delivery and organizational schemes (sponsored by GSA)

Energy efficient buildings: Building Envelopes consortium and portal (sponsored by a CDI and MIT led industry consortium)

Contractual relations for IT-enabled projects (in collaboration with Gadsby Hannah LLP)

Contemporary signature bridge design

### **Selected Prior Research**

Stereoscopic 3D visualization of buildings

Web-based and remote synchronous teaching

Project scheduling (inventor of the "Visual Scheduling and Management System," USA patent No. 5,016,170, 1991)

Risk Analysis in the Design and Building Process

Build-Operate-Transfer

Construction site organization

### **Selected Doctoral Theses** (completed)

Collaboration in Architectural Design: An IT Perspective, Shiro Mashushima (2003)

Information and Communications Technology For Real Estate Investment Management, Rick J. J. Huijbregts (2002)

Cybernetic Architecture Process and Form The Impact of Information Technology, Larry Rexton Barrow (2000)

Representation in Architecture: A Data Model for Computer-Aided Architectural Design, Pau Sola-Morales (2000)

Construction Project Networks: A Study of Internet-Based Interorganizational Information Systems in the Building Industry, Christopher Martin Castle (1999)

Interorganizational Information Systems in Building Design and Construction, Jeffrey Huang (1997)

Computer-Aided Design and Manufacturing of Complex Concrete Formwork, Volker Ruhl (1997)

A Framework for Version Management in Computer-Aided Architectural Design, SungAh Kim (1997)

Influence of Delivery Methods on Architectural Projects: Case Studies from the Seville Expo'92, Alberto Diaz Hermidas (1994)

Knowledge-Based Parametric Design: Applications on Stairs, Stefanos Kalligas (1993)

Design Criteria for Material Recycling Facilities, Irene Sewn Lee (1992)

The Impact of Technology in Hospital Design, Thom Kurmel (1991)