Martin Fischer http://www.stanford.edu/~fischer

Associate Professor, Civil and Environmental Engineering and (by Courtesy) Computer Science (Construction Engineering and Management Program)

A. Professional Preparation

Stanford University	Civ. & Env. Eng., Construction Eng. & Mgt.	Ph.D.	1991
Stanford University	Industrial Engineering and Engineering Management	M.S.	1987
Swiss Federal Institute of Technology	Civil Engineering	Diploma	1984

B. Appointments

2001 to present	Director, Center for Integrated Facility Engineering	Stanford Univ., CA
2000 to present	Associate Professor (by Courtesy), Computer Science	Stanford Univ., CA
2000	Director, Center for Integrated Facility Engineering	Stanford Univ., CA
1999 to present	Associate Professor, Civil & Environmental Engineering	Stanford Univ., CA
1996	Visiting Professor, Queensland University of Technology	Brisbane, Australia
1992 to 1999	Assistant Professor, Civil & Environmental Engineering	Stanford Univ., CA
1991 to 1992	Acting Assistant Professor, Civil & Environmental Engineering	Stanford Univ., CA
1990	Project Engineer, Rudolph & Sletten	Foster City, CA
1989	Structural Engineer, The Watry Design Group	Belmont, CA
1988	Research Engineer, Institute of Technology, Shimizu Corp.	Tokyo, Japan
1987 to 1991	Graduate Research Assistant, Dept. of Civil Engineering	Stanford Univ., CA
1986	Project Engineer, VSL Corporation	Campbell, CA
1985 to 1986	Structural Engineer, Flück Holzbau	Zürich, Switzerland
1984 to 1986	Teaching and Research Assistant, ETH	Zürich, Switzerland
1983	Teaching and Research Assistant, EPF	Lausanne, Switzerland
1981	Visiting Researcher, Polytechnic Institute	Warsaw, Poland

C. Publications

i. Publications most closely related to the proposed project

Liston, Kathleen; Fischer, Martin; and Winograd, Terry (2001). "Focused Sharing of Information for Multi-Disciplinary Decision Making by Project Teams." *Electronic Journal of Information Technology in Construction*, <u>http://www.itcon.org</u>, accepted for publication.

Fischer, Martin; Liston, Kathleen; and Schwegler, Benedict R. (2001). "Interactive 4D Project Management System." *Proceedings The Second Civil Engineering Conference in the Asian Region* (2nd CECAR), The Asia Civil Engineering Coordinating Council, Japan Society of Civil Engineers, Tokyo, Japan, 367-372.

Ragip Akbas, Martin A. Fischer, John C. Kunz (2001). "Formalizing Domain Knowledge for Construction Zone Generation." *Proceedings of the CIB-W78 International Conference IT in Construction in Africa 2001: Implementing the next generation technologies*, CSIR, Division of Building and Construction Technology, Pretoria, South Africa, also available at http://buildnet.csir.co.za/constructiafrica/au, pp. 30-1 to 30-16.

Koo, B., and Fischer, M. (2000). "Feasibility Study of 4D CAD in Commercial Construction." *Journal of Construction Engineering and Management*, ASCE, 126(4):251-260.

McKinney, K., and Fischer, M. (1998) "Generating, evaluating and visualizing construction schedules with 4D-CAD tools." Automation in Construction, 7(6):433-447.

Fischer, Martin A., and Aalami, Florian (1996). "Scheduling with Computer-Interpretable Construction Method Models." Journal of Construction Engineering and Management, ASCE, 122(4):337-347.

ii. Other relevant information

Best Paper Award at AID'00, The 6th International Conference on Artificial Intelligence in Design, for the paper: Haymaker, J., Ackermann, E. and Fischer, M. (2000). Meaning Mediating Mechanism: A Prototype for Constructing and Negotiating Meaning in Collaborative Design, *Artificial Intelligence in Design '00*, John Gero (ed.), Kluwer Academic Publishers, 691-715.

Keynote Speaker at the 2nd Worldwide ECCE Symposium on Information and Communication Technology (ICT) in the Practice of Building and Civil Engineering, June 6-8, 2001, Espoo, Finland

Engineering News Record Top 25 Newsmaker in 1996

Fröhlich, B., Fischer, M., Agrawala, M., Beers, A., and Hanrahan, P. (1997). "Collaborative Production Modeling and Planning." Computer Graphics and Applications, IEEE, 17(4):13-15.

Fischer, M., and Froese, T. (1996). "Examples and Characteristics of Shared Project Models." Journal of Computing in Civil Engineering, ASCE, 10(3):174-182.

D. Synergistic Activities

Member, North American Project Management Domain Group, International Alliance for Interoperability

Together with Walt Disney Imagineering, organized an industrial workshop on "Envisioning the Use of 3D and 4D Models in Design and Construction" (http://www.stanford.edu/group/4D/4d-workshop-main.htm) in May 1999

Together with Prof. Iris Tommelein from UC Berkeley, organized and hosted a NSF-sponsored workshop to define a research agenda for AEC process/product development in 2000 and beyond in August 1999 (http://www.ce.berkeley.edu/~tommelein/CEMworkshop.htm)

CIB (International Council for Research and Innovation in Building and Construction), Working Group 78, Information Technology in Construction Board Member and West Coast Representative since 1994

E. Collaborators and Other Affiliations

i. Collaborators

E. Ackermann (MIT), L. Bank (UW Madison), H.J. Boesch (TU Munich), M. Cutkosky (SU), P. Fishwick (UFL), T. Froese (Univ. of British Columbia), R. Fruchter (SU), F. Grobler (CERL), Z. Haddad (CCC, Athens, Greece), K. Hampson (QUT, Australia), R. Haenninen (Olof Granlund, Finland), J. Hammer (UFL), P. Hanrahan (SU), C. Howard (Design Power), J. Jucker (SU), C. Kuhne (Greiner, Munich), J. Kunz (SU), J. Laitinen (YIT, Finland); K. Law (SU), R. Levitt (SU), W.J. O'Brien (UFL), J.M. O'Connell (Stone & Webster), C. Petrie (SU), A. Ripberger (Sfirion, Munich), J. Russell (UW Madison), B. Schwegler (WDI), I. Tommelein (UC Berkeley), D. Vanier (NRC), R. Wakefield (Virginia Tech), L. Waugh (Univ. of New Brunswick), T. Winograd (SU), T. Zabelle (Strategic Project Solutions); SU=Stanford University

ii. Graduate and Post Doctoral Advisors

Principal Ph.D. Advisor: Prof. C.B. Tatum, Chair, Dept. of Civ. & Env. Eng., Stanford University Other Ph.D. Advisors: R. Levitt (Stanford), H. Krawinkler (Stanford), P. Adler (USC)

iii. Thesis Advisor and Postgraduate-Scholar Sponsor

Dr. F. Aalami, Dr. J.A. Arnold, Dr. B. Akinci, Dr. M. Clayton, M. Chakravorty, E. Collier, G. de Lemos, Dr. R. Dillon, Dr. C. Han, A. Katz, Dr. O.K. Kim, Dr. T. Korman, Dr. G. Luiten, S. Moya, Dr. W.J. O'Brien, Dr. G. Oralkan, Dr. Salazar-Kish, Dr. M.R. Tagliaventi, Dr. J. Thomsen, R. Woods. Total number of graduate students advised in the last 5 years: 38. Total number of postdoctoral scholars sponsored: 4.