

PUBLICATIONS RECORD

The University of British Columbia - Department of Civil Engineering

Date: 18 April 2011

Initials: SJF

1. SURNAME: Staub-French FIRST NAME: Sheryl
MIDDLE NAME(S): Ann

Those publications considered to be of primary importance are indicated by an asterisk (*).

LEGEND: Student, Presenter.

1. REFEREED PUBLICATIONS

(a) Journals

1. Zhang, J., Webster, A., Lawrence, M., Nepal, M., Pottinger, R., Staub-French, S. and Tory, M. (2011). "Improving the Usability of Standard Schemas." *Information Systems*, 36, 209–221.
2. Huang, D., Tory, M., Staub-French, S. and Pottinger, R. (2009). "Visualization Techniques for Schedule Comparison." *Special Issue of the Computer Graphics Forum*, 28(3), pp. 951-958.
3. Russell, A., Staub-French, S., Tran, N. and Wong, W. (2009). "Visualizing High-rise Building Construction Strategies Using Linear Scheduling and 4D CAD." *Automation in Construction*, 18(2), p 219-236. *
4. Tory, M., Staub-French, S., Po, B., and Wu, F. (2008). "Artifact-Mediated Coordination in Building Design." *Journal of Computer Supported Cooperative Work (CSCW)*, 17(4), p 311-351.
5. Staub-French, S., Russell, A. and Tran, N. (2008). "Linear Scheduling and 4D Visualization." *Journal of Computing in Civil Engineering, ASCE*, 22(3), p 192-205. *
6. Staub-French, S. and Khanzode, A. (2007). "3D/4D Modeling for Design and Construction Coordination: Issues and Lessons Learned." *Journal of Information Technology for Construction*, Vol. 12, p 381-407. *
7. Staub-French, S. and Nepal, M. (2007). "Reasoning about Component Similarity in Building Product Models from the Construction Perspective." *Automation in Construction*, 17(1), p 11-21.
8. Nie, H., Staub-French, S. and Froese, T. (2007). "OLAP-integrated Project Cost Control and Manpower Distribution Analysis." *Journal of Computing in Civil Engineering, ASCE*, 21(3), p 164-174.
9. Tabesh, A. and Staub-French, S. (2006). "Modeling and Coordinating Building Systems in 3D: A Case Study." *Canadian Journal of Civil Engineering*, 33(12), p 1490-1504. *
10. Staub-French, S., Fischer, M., Kunz, J. and Paulson, B. (2003). "An Ontology for Relating Features with Activities to Calculate Costs." *Journal of Computing in Civil Engineering, ASCE*, 17(4), p 243-254. *
11. Staub-French, S., Fischer, M., Kunz, J., Paulson, B. and Ishii, K. (2003). "A Feature Ontology to Support Construction Cost Estimating." *Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AIEDAM)*, 17(2), p 133-154.
12. Staub-French, S., Fischer, M., Kunz, J. and Paulson, B. (2003). "A Generic Feature-Driven Activity-Based Cost Estimation Process." *Advanced Engineering Informatics*, 17(1), p 23-39.
13. Froese, T., Fischer, M., Grobler, F., Ritzenthaler, J., Yu, K., Sutherland, S., Staub, S., Akinci, B., Akbas, R., Koo, B., Barron, A., and Kunz, J. (1999). "Industry Foundation Classes for Project Management - A Trial Implementation." *Electronic Journal of Information Technology in Construction*, Vol. 4, p 17-36.

(b) Conference Proceedings [Full paper review except as noted.]

My preference is to submit papers to conferences with full paper peer reviews. These include the bi-annual ASCE Construction Research Congress, the bi-annual ICCCBCE conference series, the CIB conferences, and the CSCE Construction Specialty conference.

1. Lawrence, M., Pottinger, R. and Staub-French, S. (2010). "Coordination of Data in Heterogeneous Domains." *Proceedings of the 2nd International Workshop on New Trends in Information Integration (co-located with the 26th International Conference on Data Engineering)*, Long Beach, California USA, March 1-6, 4 pp.

2. **Nepal, M.**, **Zhang, J.**, **Webster, A.**, Staub-French, S., Pottinger, R. and **Lawrence, M.** (2009). "Querying IFC-based Building Information Models to Support Construction Management Functions." Proceedings of the Construction Research Congress, ASCE, Seattle, Washington, April 5-7, 10 pages.
3. Russell, A.D., Staub-French, S., and **Tran, N.** (2008). "Creating a Visualization Environment for Assessing Construction Strategies." Proceedings of the Canadian Society of Civil Engineering Annual Conference, Quebec City, June 10-13, 11 pp.
4. **Nepal, M.**, Staub-French, S. **Zhang, J.**, **Lawrence, M.** and Pottinger, R. (2008). "Deriving Construction Features from an IFC Model." Proceedings of the Canadian Society of Civil Engineering Annual Conference, Quebec City, June 10-13, 11 pp.
5. **Tory, M.** and Staub-French, S. (2008). "Qualitative Analysis of Visualization: A Building Design Field Study," in BEyond time and errors: novel evaluation methods for Information Visualization (BELIV '08), Workshop at ACM Conference on Human Factors in Computing Systems (CHI) 2008, April 5-10, Florence, Italy, 8 pp.
6. **Tran, N.**, Russell, A.D. and Staub-French, S. (2007). "4D CAD via Linear Planning and 3D CAD." Proceedings of the Construction Research Congress, ASCE, May 6-8, Grand Bahama Island, 10 pp. *
- *Winner, Best Paper Award*
7. **Fard, M. G.**, Staub-French, S., Po, B., Tory, M. (2006). "Requirements for a Mobile Interactive Workspace to Support Design Development and Coordination." Proceedings of the ICCCBE-XI: 11th Int'l Conf. on Computing in Civil and Building Engineering, Montreal, Quebec, June 14-16, p 3587-3596. *
8. **Zhang, K.**, Russell, A.D., Staub-French, S. (2006) "Knowledge Management as it Pertains to Construction Quality Management." Proceedings of the CSCE 1st International Construction Specialty Conference, Calgary, AB, May 23-26, 10 pp.
9. **Tabesh, A. R.** and **Staub-French, S.** (2005). "Case Study of Constructability Reasoning in MEP Coordination." Proceedings of the Construction Research Congress, ASCE, San Diego, California, April 5-7, p 1223-1232.
10. **Staub-French, S.** (2004). "Feature-based Product Models for Building Construction." Proceedings of the 10th International Conference on Computing in Civil and Building Engineering (ICCCBE-X), Weimar, Germany, June 2-4, p 237-251. [abstract only review] *
11. **Staub-French, S.** and Froese, T. (2003). "A Conceptual Framework for Representing Project Model Interfaces." Proceedings of the CSCE 5th Construction Specialty Conference, Moncton, New Brunswick, Canada, June 4-7, p 125-134. [abstract only review]
12. **Froese, T.** and Staub-French, S. (2003). "A Unified Approach to Project Management." Proceedings of the 4th Joint Symposium on Information Technology in Civil Engineering, ASCE, Nashville, Tennessee, November 12-15, p 87-98.
13. **Staub-French, S.** (2003). "Providing Cost and Constructability Feedback to Designers." Proceedings of the Construction Research Congress, ASCE, Honolulu, Hawaii, March 19-21, p 151-158. *
14. **Staub-French, S.** and Fischer M. (2002). "Generating and Maintaining Activity-based Cost Estimates with Feature-Based Product Models." 19th International Symposium on Automation and Robotics in Construction, Washington D.C., September 23-25, p 287-292.
15. **Staub-French, S.** and Fischer, M. (2000). "Formalisms and Mechanisms Needed to Maintain Cost Estimates based on an IFC Product Model." Proceedings of the 8th International Conference on Computing in Civil and Building Engineering (ICCCBE-VIII), Stanford University, August 14-17, p 716-723. *
16. **Staub, S.**, and Fischer, M. (1999). "The Practical Needs of Integrating Scope, Cost, and Time." Proceedings of the 8th International Conference on Durability of Building Materials and Components, CIB W78 Workshop on Information Technology in Construction, Vancouver, BC, May 30 - June 3, p 2888-2898.
17. **Akinci, B.**, Staub, S., and Fischer, M. (1997). "Productivity and Cost Analysis Based on a 4D Model." IT Support for Construction Process Reengineering, CIB Proceedings, Publication 208, R. Drogemuller (Ed.), Cairns, Australia, July 9-11, p 23-32.

(c) **Other**

2. **NON-REFEREED PUBLICATIONS**

(a) **Journals**

(b) **Conference Proceedings**

1. Staub, S. and Fischer, M. (1998). "Constructability Reasoning based on a 4D Facility Model." Structural Engineering World Wide, T191-1, Elsevier Science Ltd, 9 pp.

(c) **Other**

1. Staub-French, S. (2002). "Feature-driven Activity-based Cost Estimating." PhD Thesis, Stanford University. *
2. Staub-French, S. and Fischer, M. (2001). "Industrial Case Study of Electronic Design, Cost, and Schedule Integration." Engineer Degree Thesis (also published as Technical Report #122, Center for Integrated Facility Engineering), Stanford University.
3. Staub-French, S. and Fischer, M. (2000). "Practical and Research Issues in using Industry Foundation Classes for Construction Cost Estimating." Working Paper #56, Center for Integrated Facility Engineering, Stanford University.
4. Staub, S., Fischer, M., and Spradlin, M. (1999). "Into the Fourth Dimension." Civil Engineering, ASCE, 69(5), p 44-47. *

3. **BOOKS - AUTHORED**

4. **BOOKS - EDITED**

5. **CHAPTERS IN BOOKS**

1. Staub-French, S. and Fischer, M. (2006). Chapter titled "Enabling Concurrent Engineering through 4D CAD" published in *Concurrent Engineering in Construction Projects*. Anumba C. J., Kamara J. M. and Cutting-Decelle A. F. (Eds.), Series: Spon Research, Publisher: Taylor and Francis, ISBN: 9780415394888.

6. **PATENTS**

7. **SPECIAL COPYRIGHTS**

8. **ARTISTIC WORKS, PERFORMANCES, DESIGNS**

9. **OTHER WORKS**

1. Computer Software, Staub-French, Sheryl (2002). A prototype activity-based cost estimating system (ACE) that generates and maintains cost estimates for a given 3D model. ACE imports a 3D CAD model of a building and generates resource-loaded and cost-loaded activities based on the particular design features in the input 3D product model. ACE also helps estimators to identify the cost information affected by design changes, and maintain construction cost information more consistently, accurately, and efficiently than traditional tools. This software was used to develop and test theories about the influence of design features on construction costs.

11. **WORK IN PROGRESS** *(including degree of completion)*

1. Nepal, M., Staub-French, S., Pottinger, R., Webster, A., and Tory, M. "Approach for Querying Building Information Models to Support Construction." To be submitted to the Journal of Advanced Engineering Informatics. 95% complete.
2. Melanie Tory, Sheryl Staub-French, Dandan Huang, Yu-Ling Chang, Colin Swindells, Rachel Pottinger, "Comparative Visualization of Schedules." To be submitted to the journal Automation in Construction. 95% complete.
3. Cavka, H., Staub-French, S., and Tory, M. "Characterization of Design Coordination Meeting Activities." To be submitted to the Building Research and Information Journal. 75% complete.