Abbreviated Vita – Alan Borning

Education

- Ph.D., Computer Science, Stanford University, 1979. Advisor: Professor Terry Winograd. Thesis title: *ThingLab—A Constraint-Oriented Simulation Laboratory*.

- M.S., Computer Science, Stanford University, 1973.

- B.A., Mathematics, Reed College, Portland, Oregon, 1971.

Employment

- Department of Computer Science and Engineering, University of Washington, 1980 – present. Current rank: Professor (since 1993).

- Visiting Scientist at Rank Xerox EuroPARC, Cambridge, England, Sept 1989 – Sept 1990.

- Visiting Professor at University of Melbourne and Monash University, Australia, January–July 1997.

Recent Publications (a selection)

1. Alan Borning, Richard Lin, and Kim Marriott, "Constraint-based Document Layout for the Web," to appear in *ACM Multimedia Systems Journal*.

2. Greg Badros, Alan Borning, Kim Marriott, and Peter Stuckey, "Constraint Cascading Style Sheets for the Web," *Proceedings of the 1999 ACM Conference on User Interface Software and Technology*, November 1999.

3. Alan Borning and Bjorn Freeman-Benson, "Ultraviolet: A Constraint Satisfaction Algorithm for Interactive Graphics," *CONSTRAINTS: An International Journal*, Special Issue on Constraints, Graphics, and Visualization, Vol. 3 No. 1, April 1998, pages 9–32.

4. Alan Borning, Richard Lin, and Kim Marriott, "Constraints for the Web," *Proceedings of the 1997 ACM Multimedia Conference*, November 1997, pages 173-182.

5. Warwick Harvey, Peter J. Stuckey, and Alan Borning, "Compiling Constraint Solving using Projection," *Proceedings of the Third International Conference on the Principles and Practice of Constraint Programming*, October 1997, pages 491-505.

6. Alan Borning, Kim Marriott, Peter Stuckey, and Yi Xiao, "Solving Linear Arithmetic Constraints for User Interface Applications," *Proceedings of the 1997 ACM Conference on User Interface Software and Technology*, October 1997, pages 87-96.

7. Alan Borning, Richard Anderson, and Bjorn Freeman-Benson, "Indigo: A Local Propagation Algorithm for Inequality Constraints," *Proceedings of the 1996 ACM Symposium on User Interface Software and Technology*, November 1996, pages 129–136. (Best Paper Award.)

8. Gus Lopez, Bjorn Freeman-Benson, and Alan Borning, "Implementing Constraint Imperative Programming Languages: The Kaleidoscope'93 Virtual Machine," *Proceedings of the 1994 ACM Conference on Object-Oriented Programming Systems, Languages, and Applications*, October 1994, pages 259–271.

9. Molly Wilson and Alan Borning, "Hierarchical Constraint Logic Programming," *The Journal of Logic Programming*, special issue on Constraint Logic Programming, Vol. 16 Nos. 3 & 4, (July, August 1993), pages 277–318.

10. Michael Sannella, John Maloney, Bjorn Freeman-Benson, and Alan Borning, "Multi-way versus One-way Constraints in User Interfaces: Experience with the DeltaBlue Algorithm," *Software—Practice and Experience*, Vol. 23 No. 5, (May 1993), pages 529–566.

Awards

- Forsythe Memorial Award, Fulbright Senior Scholar Award, University of Washington Minority Science & Engineering Program faculty recognition award.

Recent Grants

- National Science Foundation Grant IRI-9302249, "Constraint-Based Languages and Environments for Building Interactive Systems," $180,000, July 1994–June 1997.

- National Science Foundation Grant CCR-9402551, "Constraint Imperative Programming," $180,000, August 1994–July 1997.

- Fulbright Senior Scholar Award for lecturing and research in constraint-based languages and systems, Monash University and University of Melbourne, Australia, January-July 1997.

- University of Washington University Initiatives Fund, "Puget Sound Regional Synthesis Model: Human Dimension: Development of an Integrated Urban Ecological Simulation Model for the Puget Sound" Marina Alberti, Alan Borning, and Paul Waddell, October 1998–June 2000.

- National Science Foundation Grant CMS-9818378 (Urban Research Initiative), "Reusable Modeling Components for Simulating Land Use, Transportation, and Land Cover," Paul Waddell, Alan Borning, Scott Rutherford, and Marina Alberti, $439,357, February 1999–January 2001.

- National Science Foundation Grant IIS-9975990 (Human Computer Interaction Program), "Using Constraints to Enable Flexible Access and Interaction on the Web," $315,601, August 1999–July 2002.

Program and Organizing Committees, Boards, Editorships   (a selection)

Associate Editor, *ACM Computing Surveys*, 1981–1983; Northwest Regional Representative, Board of Directors, Computer Professionals for Social Responsibility, 1983–1987; Eleventh Annual Principles of Programming Languages Conference, 1984; ACM Conference on Object-Oriented Programming Systems, Languages, and Applications, 1986, 1987, 1990, 1993; European Conference on Object-Oriented Programming, 1988, 1992; Program Chair, Second Workshop on the Principles and Practice of Constraint Programming; Organizing Committee Member, International Conferences on Constraint Programming, 1993–present; Steering Committee, NSF Interactive Systems Grantees Workshop, 1995.

Ph.D. Students Graduated

- Jeffrey Scofield (1985), Robert Duisberg (1986), Bjorn Freeman-Benson (1991), John Maloney (1991), Molly Wilson (1993), Michael Sannella (1994), Gustavo Lopez (1997).

Recent Courses Taught (a selection)

- Human Computer Interaction (MS course); Human Computer Interaction (PhD course); Compilers (undergraduate); Concepts of Programming Languages (PhD course); Comparative Programming Languages (undergraduate), Introductory Programming (freshman), Computers and Society (undergraduate/graduate).