

## Research Interests

Human Computer Interaction (HCI), Computer Supported Cooperative Work (CSCW), Computer Supported Collaborative Learning (CSCL), Educational Technology, computer graphics and animation.

## Education

<b>University of Washington</b>	<b>Seattle, WA</b>	<b>1990 - 1998</b>
Computer Science MS 1993, PhD 1998. Thesis: Cooperatively Controlled Objects in Support of Collaboration		
<b>University of Michigan</b>	<b>Ann Arbor, MI</b>	<b>1982 - 1985</b>
Theoretical Mathematics and Pre-Medicine, B. S., Honors College		

## Skills Summary

**Management:** Able to build and improve teams. Mentored employees in interpersonal, communication and technical skills. Counseled other managers to improve communication and team building skills.

**Communication/coordination:** Highly skilled at assisting people collaborate and find common ground.

**Organization:** Proven ability to effectively organize life cycle and end user documentation.

**Design and Development:** Experienced all phases of software life cycle. Designed and developed applications in numerous environments and languages (functional, object oriented, and logical).

**Creativity:** Recognized for creative solutions to problems and ability to communicate involved technical concepts using diagrams, sketches, storyboards. Other artistic endeavors include pottery, metalwork, jewelry, woodworking, landscape design, mosaics, and knitting.

**Hardware/OS:** PC/Windows and DOS, Various/\*nix, Apple Macintosh/OSX, DEC/VMS, Sun/OpenWindows;

**Languages:** Ada, Assembly, BASIC, C, C++, HTML, Java/JDK, Lisp, Modula-2, Perl, Prolog, Self, Smalltalk

## Professional Experience

<b>Performant/Mercury Interactive</b>	<b>Bellevue, WA</b>	<b>2001 - 2003</b>
<i>Program/Project Manager</i>		
<ul style="list-style-type: none"><li>• Worked in partnership with Management, Sales, Marketing, Professional Services, Development and Quality Assurance to identify and select features for each release. Developed specifications for critical features.</li><li>• Delivered project plan per release. Tracked customer requirements and deliveries as part of this process. Communicated timely project documentation to internal consumers. Implemented a project summary for each release to advise senior management about significant development issues.</li><li>• Directed the delivery of product user documentation to client. Delivered documentation plan per revision. Coordinated with developers for information about product features. Personally produced final versions of the documentation twice and managed contractors to produce other releases.</li><li>• Developed company wide development/test/software release process that improved coordination between groups.</li><li>• Drove life cycle practices, including feature selection, design, and post mortems.</li><li>• Performant was sold to Mercury Interactive in May 2003 for \$22.5M (more than 3 times initial investment). Facilitated the transfer of engineering and quality assurance information between Washington and Israel.</li></ul>		
<i>Quality Assurance (QA) Manager</i>		
<ul style="list-style-type: none"><li>• Directly supervised a technical team of four. Solved difficult interpersonal team dynamics. Instituted team meetings and reports that provided timely information and promoted open dialogue between team members.</li><li>• Developed an efficient QA test plan procedure for each new release in coordination with other managers and team members. The plan established prioritization of test case execution and agreed upon schedule of engineering releases to QA.</li></ul>		
<i>Lead User Interface Architect</i>		
<ul style="list-style-type: none"><li>• Directly supervised and mentored two engineers, including frequent development discussions, conducting annual reviews and setting objectives.</li></ul>		

- Designed and implemented a major portion of the OptiBench Graphical User Interface for Microsoft Windows in Java. Developed use cases and specifications for new features. Created icons. Continued coordinating this design effort subsequent to changing positions within the company.
- Conducted usability testing through observations in makeshift test lab as well as observations of user training sessions. Developed customer questionnaires to gain additional insights in usability of the product.

**Brickware** **Seattle, WA** **1988 - present**

*Independent software solution company. Representative projects include:*

- Senior Software Engineer for SchoolSoft to design and develop their v1.0 product.
- External design review team member for Logo Computer Systems Incorporated.
- Maintain and enhance membership database for Secular Jewish Circle of Puget Sound. Edit and publish bi-monthly newsletter. Design and developed <http://www.secularjewishcircle.org>.
- Initial design and implementation of <http://www.penatesdesign.com/>.
- Design and implement website: <http://www.brickerassociates.com/> (in progress).
- Designed and implemented a common application program interface (API) for Ark Interface Kidspace and Workspace in Microsoft Windows with Visual C++.
- Designed and implemented a Table Object in Windows in C++ for a presentation product by Asymetrix.
- Designed and implemented user interface enhancements to FileShare, a distributed network file-manager.
- Ported Proximity Technology's spelling checker, hyphenation and thesaurus from DOS to Windows.

**MathSoft** **Seattle, WA** **1999**

*Research Engineer*

- Project manager. Tracked project schedule and coordinated team members. Designed, implemented and tested an ActiveX control to support image processing and image annotations. Developed and coordinated a workshop where professional teachers tested educational materials that used this control.
- Designed and implemented enhancements to a pharmacokinetics application written in Java.

**University of Washington** **Seattle, WA** **1993 - 1998**

*Research Scientist/Human Interface Technology (HIT) Laboratory*

Project manager for phase II of the Virtual Playground (VP) project, a distributed, 3D virtual world written for PCs in Java. Responsibilities include designing and implementing enhancements to the system, developing schedules and budgets, and negotiating with funding source.

*Research Assistant* **1993 - 1998**

- Mathematics Experiences Through Image Processing (METIP) and Colmage. Designed Computer Supported Collaborative Learning (CSCL) and image processing applications aimed at encouraging Jr. High students in mathematics. Windows applications written in Visual C++, Borland Object Windows Library (OWL), and Visual Basic.
- Resource Facility for Kinetic Analysis (RFKA). Ported the Simulation, Analysis and Modeling (SAAM) II program from Sun/Open Windows to Windows using Visual C++. Responsible for determining and purchasing the development environment.

*Teaching Assistant* **Winter 1991, Winter 1992, Winter 1998**

- Taught undergraduate Introduction to Computer Programming II and Data Structures, and graduate level Human-Computer Interaction courses.

**Ark Interface** **Seattle, WA** **1994 - 1997**

*Senior Software Engineer*

Assisted in the redesign and implementation of Navigator 3.x, solely responsible for design and implementation of the Game Room. Lead Engineer for Kidspace 3.0. Implementation for Windows in Visual C++.

**Adonis Corp./ConnectSoft** **Bellevue, WA** **1990 - 1993**

*Software Engineer*

- Designed and implemented a front end to Blood Pressure monitors for Windows in Visual C++.
- Technical Lead Engineer, Clip-Art Window Shopper. Designed and implemented: keyword search engine; information exchange; requesting, storage and retrieval of user information and communications via modem. Edited Quick Clips newsletter for customers.
- Central Point Software. Designed and implemented a Microsoft Windows version of PC Tools.

**Caddex Corporation** **Woodinville, WA** **1987 - 1988**

*Software Engineer*

Designed, implemented, tested and integrated spelling checker, dictionary and thesaurus user interfaces for a networked desktop publishing product for Windows. Designed table of contents and index generators.

*Software Engineer*

Defined software requirements for the Flight Path Management and Navigation functions of the Advanced Tactical Fighter project. Prototyped these functions in Ada on a DEC VAX/VMS system.

**Publications**

Bricker, L., Baker, M., Fujioka, E., Tanimoto, S. (1999) A System for Developing Software that Supports Synchronous Collaborative Activities, in *Proceedings of EdMedia '99*, (Seattle, WA, June 19-24, 1999), pp. 587-592.

Schwartz, P., Bricker, L., Campbell, B., Furness, T., Inkpen, K., Matheson, L., Nakamura, N., Shen, L-S., Tanney, S., Yen, S. (1998) Virtual Playground: Architectures for a Shared Virtual World, in *Proceedings of ACM Symposium on Virtual Reality Software and Technology 1998* (Taipei, Taiwan, November 2-5, 1998), pp. 43-50.

Bricker, L., Baker, M., Fujioka, E., Tanimoto, S. (1998) A System for Developing Software that Supports Synchronous Collaborative Activities. University of Washington Technical Report UW-CSE-98-09-03. September, 1998.

Baker, M.J. Bricker, L.J., Tanimoto, S.L. Cooperative interaction techniques in a computer-supported collaborative learning environment. University of Washington Technical Report UW-CSE-97-04-03. April, 1997.

Bricker, L.J., Baker, M.J., Tanimoto, S.L. Support for cooperatively controlled objects in multimedia applications, in *Proceedings of CHI'97, Extended Abstracts* (Atlanta, March 22-27, 1997), ACM Press, N.Y., pp 313-314.

Bricker, L., Tanimoto, S., McLain, E. Colmage - a Cooperatively Controlled Image Warper. Delivered at *the World Conference on Educational Multimedia and Hypermedia*, 1996, Boston, MA.

Bricker, L., Tanimoto, S., Rothenberg, A., Hutama, D., Wong, T. Multiplayer Activities Which Develop Mathematical Coordination, in *Proceedings of CSCL'95* (Bloomington, October 17-20, 1995), ACM Press, N.Y., pp 32-39.

**Advising**

Supervisor, Marla Baker, graduate qualifying exam project, 1996-1997. Project: Cooperative Interaction Techniques for Graphical Objects in a Collaborative Activity, Technical Report UW-CSE-97-04-03.

Supervisor, Emi Fujioka, undergraduate senior project, 1997. Project: Cooperative chopstick activity implemented with Colt.

Supervisor, Chris Chapman, undergraduate work study student, 1997-1998. Project: User study of cooperatively controlled color matcher activity.

**Service**

Reviewer, Conference on Human Factors in Computing Systems (CHI), 1998; User Interface Software and Technology, 2002, 2003; IEEE Symposium on Visual Languages, 1996, 1997; and International Journal of Software Engineering and Knowledge Engineering.

Member of the Demos Committee, User Interface Software and Technology (UIST) conference, 1998.

CS women's group coordinator, University of Washington, Department of Computer Science and Engineering, 1994-1997.

Volunteer, Inquiry-based Science program, Bryant and Lowell Elementary schools, Seattle, WA.

Volunteer, Elected steering committee member, Secular Jewish Circle of Puget Sound.

Volunteer in charge of finance and procurement, Wedgwood Montessori School Fundraiser, 2004.

**Personal**

Enthusiastic about cooking, gardening, jewelry making, knitting, bicycling (including the Seattle to Portland bike ride, 1995), rollerblading, skiing, co-rec softball (1988-present). Proficient in Spanish.

## References

Professor Steven Tanimoto  
Department of Computer Science and Engineering  
Box 352350  
Seattle, WA 98195-2350  
(206) 543-4848  
tanimoto@cs.washington.edu

Professor Alan Borning  
Department of Computer Science and Engineering  
Box 352350  
Seattle, WA 98195-2350  
(206) 543-6678  
borning@cs.washington.edu

Professor Earl Hunt  
Department of Psychology and Adjunct for Computer Science and Engineering  
Box 351525  
Seattle, WA 98195  
(206) 543-8995  
ehunt@u.washington.edu

Jonathan Weeks  
Director of Engineering  
Mercury Interactive  
3500 Carillon Point  
Kirkland, WA 98033  
(425) 893-7900  
jweeks@merc-int.com

Przemyslaw Pardyak  
Director of Engineering  
Mercury Interactive  
3500 Carillon Point  
Kirkland, WA 98033  
(425) 893-7900  
ppardyak@merc-int.com

James Warnock  
(Was Director of Engineering, Ark Interface II)  
james\_warnock@hotmail.com