

ERIK H. TRAINER

Education **P.h.D student in Information and Computer Science** **September 2005 – Present**

University of California, Irvine
Department: Informatics
Concentration: Software
Website: <http://www.ics.uci.edu/~etrainer>
Advisor: David Redmiles (<http://www.ics.uci.edu/~redmiles>)
Passed Preliminary P.h.D Advancement Exam Fall, 2007

M.S., Informatics - Software **September 2005 - June 2007**

University of California, Irvine
GPA: 3.9

B.S., Information and Computer Science **September 2001 - June 2005**

University of California, Irvine
GPA: 3.6
Dean's Honor List Fall 2002, Spring 2003, Fall 2003, Winter 2004, Spring 2004
Golden Key International Honor Society

**Research
Interests**

Socio-technical Systems
Information Visualization for Collaboration
Human Computer Interaction (HCI)
Computer Supported Cooperative Work
Software Engineering

**Work
Experience**

Ariadne Research Project **April 2004-Present**

Research Assistant

Designed and implemented Ariadne, a software tool that automatically identifies dependency relationships between software developers based on the code they write. Currently using Ariadne as a means toward a larger research goal: to understand how shared visualizations of dependencies influence group collaboration in software development projects.

Performed and published results from a usability evaluation of Ariadne's visualizations and interface using three well-known usability analysis techniques.

Initiated and implemented the tool's ability to mine CM repository information from IBM's Jazz Team Collaboration Platform, early in its beta phase.

Exploring different visualizations ranging from small social network graphs to scalable, dense visualizations for use with multiple monitors and large screen real estate.

Supervised by David Redmiles. <http://awareness.ics.uci.edu/~ariadne>.

Qualitative Research Methods Course **January 2006-March 2006**

Student Ethnographer

Performed a qualitative research study of street performers in Santa Monica, CA.

Developed an interview protocol and interviewed multiple informants.

Observed musical performers licensed by the city, interviewed them, evaluated the interview data using scientifically-sound techniques and published a research report at the end of the school quarter.

WallStreet University, Inc.

June 2004-Present

Intern

Overseeing company deployment and custom implementation of Moodle, an open-source course management system for integrating online educational course materials.

Managing company's in-house web development and programming team, as well as remote programming teams located at Cal State Fullerton (CSUF) Fullerton, CA and The University of the West, Rosemead, CA.

Implemented Javascript and HTML for the front-end of an e-commerce shopping cart.

Developed a series of Flash courses with animation and basic action script tailored to an interactive learning design.

Wrote small PHP modules for main web site to facilitate communication between employees and customers (e.g. to handle course announcements).

Pilot Chemical Company

June-September 2001, June-September 2002

Intern

Initiated the use of maintenance database software in the plant.

Developed monthly spreadsheets documenting electric/gas usage.

Reorganized and implemented material safety data sheets (MSDS) file system for the plant.

Assisted plant manager in updating and computerizing ISO 9000 documents.

Initiated work on Access Database for Customer Complaint system.

Pac Comm Technologies, Inc.

June-August 2000

Intern

Cooperated with other interns to learn the fundamentals of Java.

Implemented new web pages and updated existing sections of the company web page.

Skills

Software: Microsoft Visual Studio .NET, Eclipse IDE, Adobe Dreamweaver, Adobe Flash, Inkscape, Adobe Illustrator, Standard MS Office Software

Operating Systems: Windows 9x, XP, NT, ME, 2K, MS-DOS 3.3-6.22, Unix, Windows Vista, Mac OS X

Programming: Java, C++, C#, PHP, SQL, Flash Actionscript

Techniques: Implementing Eclipse Plugins, Design Patterns, Internet Scripting

Research studies: Basic knowledge of and experience with the design of ethnographic studies, participant observation, conducting interviews and transcribing them. Submitted a proposal to the Institutional Review Board (IRB) and performed the subsequently approved ethnographic study over the course of eight (8) weeks.

Publications

Graduate Student Consortiums

Trainer, E. "Connecting the Social and Technical Aspects of Computing with Visualization," In *Proceedings of the IEEE Symposium on Visual Languages and Human Centric Computing*, IEEE Computer Society, Washington, DC, 2008, pp. 272-273.

Workshops

Trainer, E. and Redmiles, D.F., Towards an Infrastructure for Software Visualization Research," In *First International Workshop on Infrastructure for Research in Collaborative Software Engineering (IRCoSE)*, held in conjunction with The 16th International Symposium on the Foundations of Software Engineering

(FSE), ACM, New York, available at <http://home.segal.uvic.ca/~IRCoSE-2008/>.

Al-Ani, B., Trainer, E., Ripley, R., Sarma, A., van der Hoek, A., Redmiles, D.F., "Continuous Coordination within the Context of Cooperative and Human Aspects of Software Engineering," In *Proceedings of the 2008 International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE)*, held in conjunction with The 2008 International Conference on Software Engineering (ICSE), ACM, New York, NY, pp. 1-4.

Trainer, E., Quirk, S., de Souza, C. R. B., Redmiles, D.F., "Bridging the Gap between Technical and Social Dependencies with Ariadne," In *Proceedings of the 2005 OOPSLA Workshop on Eclipse Technology Exchange*, ACM, New York, pp. 26-30.

de Souza, C.R.B., Dourish, P., Redmiles, D.F., Quirk, S., and Trainer, E., "From Technical Dependencies to Social Dependencies," In *Proceedings of the 2004 Workshop on Social Networks*, held in conjunction with The 2004 Conference on Computer-Supported Cooperative Work (CSCW), available at <http://www.ischool.washington.edu/mcdonald/cscw04/>.

Journals

Al-Ani, B., Redmiles, D., van der Hoek, A., Alvim, M., da Silva, I., Mangano, N., Trainer, E., Sarma, A., "Continuous Coordination within Software Engineering Teams: Concepts and Tool Support," In *Journal of Computer Science and Engineering in Arabic, Special Issue on Software Engineering*, in press.

Redmiles, D., van der Hoek, A., Al-Ani, B., Hildenbrand, T., Quirk, S., Sarma, A., Silveira Silva Filho, R., de Souza, C., Trainer, E., "Continuous Coordination: A New Paradigm to Support Globally Distributed Software Development Projects", *Wirtschaftsinformatik, Special Issue on the Industrialization of Software Development*, V. 49, 2007, pp. 28-38.

Conference Proceedings

Trainer, E., Quirk, S., de Souza, C.R.B., and Redmiles, D.F., "Analyzing a Socio-Technical Visualization Tool Using Usability Inspection Methods", In *Proceedings of the IEEE Symposium on Visual Languages and Human Centric Computing*, IEEE Computer Society, Washington, DC, 2008, pp. 78-81.

de Souza, C.R.B., Quirk, S., Trainer, E., and Redmiles, D.F., "Supporting Collaborative Software Development through the Visualization of Socio-Technical Dependencies," In *Proceedings of the 2007 International ACM Conference on Supporting Group Work*, ACM, New York, NY, 2007, pp. 147-156.

Coursework Undergraduate

Discrete Math, Introduction to Computer Science, Boolean Logic, Linear Algebra, Intro to Software Engineering, Programming Languages, Software Tools and Methods, Digital Logic and Design, Intro to Artificial Intelligence, Computer Networks, Compilers, Operating Systems, Computer Systems Architecture, File and Database Management

Graduate

Human-Computer Interaction, Social Analysis of Computing, Software Engineering, Qualitative Research Methods, Software Environments, Information Systems, Interaction and Collaboration Technologies (ICT) Research Methods, Collecting Social Network Data, Internet, Computer Supported Cooperative Work, Software Processes, Application of Software Design Technologies, Knowledge Management

Awards and Grants	Graduate Student Researcher, IBM Jazz Innovation Grant,	2008
	Department of Education (GAANN) Fellowship recipient	2005 - Present
	Graduate Student Researcher, IBM Eclipse Innovation Grant	2005
	UCI Undergraduate Research Opportunities Program (UROP) Funding recipient	2005

Membership Student member of ACM (Association for Computing Machinery)
Student member of IEEE

Community Student Reviewer for Springer Book Chapter on Collaborative Software Engineering, 2008

Service

Student Reviewer for the *2008 IEEE Symposium on Visual Languages and Human Centric Computing*

Member, Organizing Committee, 2008 UC Irvine Graduate Student Research Symposium

Student Volunteer, *20th IEEE/ACM Conference on Automated Software Engineering (ASE 2005)*,
November 7-11, 2005

Participant in research experiments led by graduate students (since 2005)