

STEVEN L. MARTIN

RESEARCH INTERESTS

Computer networks and security, computer virus propagation, machine learning, graphics.

EDUCATION

- 2003 - present University of California, Berkeley Berkeley, California
- PhD student in Computer Science, systems concentration. Advised by Dr. Anthony Joseph.
 - Passed PhD preliminary exam in Computer Graphics, Fall 2004.
 - Currently on Academic Leave for 2005-2006.
- 2003 - 2005 University of California, Berkeley Berkeley, California
- M.S. in Computer Science completed August 2005 (degree officially awarded December 2005).
 - M.S. thesis title: "Learning on Email Behavior to Detect Novel Worm Infections". Advised by Dr. Anthony Joseph and Dr. David Wagner.
- 1998 - 2003 University of Washington Seattle, Washington
- B.S. with College Honors in Computer Engineering, Minor in Mathematics

RESEARCH PUBLICATIONS AND PRESENTATIONS

Systems and Networking:

- Steve Martin. "Analyzing Email Behavior for Novel Worm Detection." MS Thesis, UC Berkeley, 2005.
- Steve Martin, Anil Sewani, Blaine Nelson, Karl Chen and Anthony Joseph. "Analyzing Behavioral Features for Email Classification." *CEAS (Conference on Email and Anti-Spam)*, July 2005.
- Steve Martin, Anil Sewani, Blaine Nelson, Karl Chen and Anthony Joseph. "Analyzing Behavioral Features for Email Classification." *Summer 2005 ROC Retreat*, June 2005.
- Steve Martin, Anil Sewani, Blaine Nelson, Karl Chen and Anthony Joseph. "Learning on User Behavior for Novel Worm Detection." *Summer 2005 ROC Retreat*, June 2005.
- Steven L. Martin, Anil Sewani, Blaine Nelson, and Karl Chen. "Learning on User Behavior for Novel Worm Detection." Presented at the *U.C. Berkeley Systems Lunch*, March 2005
- Michael Swift, Steven Martin, Henry M. Levy, and Susan J. Eggers. "Nooks: an architecture for reliable device drivers" in *Proceedings of the Tenth ACM SIGOPS European Workshop*, Saint-Emilion, France, Sept. 2002.
- Michael Swift, Steven Martin, Henry M. Levy, and Susan J. Eggers. "Nooks: an architecture for reliable device drivers." *UW Networking and Systems Retreat*, June 2002

Machine Learning:

- Steven Martin. "Name That Link: Intelligent Link Anchor Generation." UW CSE Technical Report #02-10-02. Sept. 2002.

Computer Graphics:

- Keith Grochow, Steven L. Martin, Zoran Popovic, and Aaron Hertzmann. "Style-Based Inverse Kinematics" in *ACM Transactions on Graphics* (SIGGRAPH 2004).

RELEVANT PROFESSIONAL EXPERIENCE

8/2005 – present Amazon.com A9 Palo Alto, California

Software Development Engineer

- Research on improving search result relevance for Amazon.com searches in a variety of novel ways.

12/2003 – 8/2005 University of California, Berkeley Berkeley, California

Computer Science Graduate Research

- Investigating novel ways of halting virus propagation. Advised by Dr. Anthony Joseph.
- Researched *video mosaics*: two-dimensional arrangements of video tiles statistically placed in a manner that resembles a larger video. Advised by Dr. James O'Brien.
- Investigated "*foot-skate*" *cleanup* from motion capture data. Advised by Okan Arıkan and Dr. David Forsyth.

6/2004 – 9/2004 Amazon.com A9 Palo Alto, California

Software Development Engineer Intern

- Worked on a variety of projects involving Amazon.com search technology, including spell check, search database generation, and related searches.

7/1999 – 8/2003 Ed-Tech Development Seattle, Washington

Software Developer/Multimedia Consultant

- Worked with a team of software engineers to develop educational tools for the University of Washington's Catalyst Initiative. (www.catalyst.washington.edu)
- Developed and taught workshops for faculty on a variety of topics focusing on multimedia.

6/2002 – 9/2002 Electronic Arts Tiburon Maitland, Florida

Software Engineering Intern

- Reworked studio-wide build tools. Developed a system to automatically build and remotely test games on PlayStation 2, GameCube, and X-Box development machines via a GUI.
- Assorted other projects, including modifying low-level system libraries for all platforms to enable automatic remote debugging.

12/2001 - 6/2002 University of Washington Seattle, Washington

Computer Science and Engineering Undergraduate Research

- Assisted Prof. Hank Levy in developing the NOOKS architecture for reliable device drivers.
- Worked with Dr. Zoran Popovic and Dr. Aaron Hertzman to develop a learning system capable of generating realistic animation data based on specifiable features from motion capture data.
- Developed a machine learning system that analyzes web page pairs to create easily understood anchor texts between them. Advised by Dr. Pedro Domingos and Corin Anderson.

TEACHING EXPERIENCE

- 8/2003 - Present University of California, Berkeley Berkeley, California
- Teaching Assistant, *CS 162: Operating Systems and System Programming* (Autumn 2003)
 - Teaching Assistant, *CS 162: Operating Systems and System Programming* (Spring 2004)
- 6/2001 – 8/2003 University of Washington Seattle, Washington
- Teaching Assistant, *CSE 143: Computer Programming II* (Summer 2001)
 - Teaching Assistant, *CSE 457: Computer Graphics* (Autumn 2002)
 - Teaching Assistant, *CSE 457: Computer Graphics* (Spring 2003)
 - Teaching Assistant, *CSE 326: Data Structures* (Summer 2003)

SCHOLARSHIPS AND AWARDS

- National Science Foundation Graduate Research Fellowship Honorable Mention, 2005
- National Science Foundation Graduate Research Fellowship Honorable Mention, 2004
- Elected to Tau Beta Pi National Engineering Honors Society
- Elected to Golden Key National Honors Society
- Graduated with full College Honors from the University of Washington College Honors Program.
- University of Washington College of Engineering Wayne C. & Grace M. Stanley Scholarship
- Named to University of Washington Deans List, both Quarterly and Annual, multiple times.
- Elected to Phi Eta Sigma National Undergraduate Honors Society
- Fluke Company Scholarship
- Target Company Scholarship