JOEL H. WEINBERGER

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Education and Work Experience

University of California, Berkeley—Berkeley, CA

Ph.D., Computer Science (Expected 2013)

- Relevant Courses:
 - Systems

Security

• Sun Microsystems—San Francisco, CA

Software Engineer, July 2007 - July 2008

- Full-time software engineer on the Fishworks advanced development team.
- Developed Solaris extensibility to an appliance kit framework, specifically in the Sun Storage 7000 series of NAS products. Worked on iSCSI and FTP integration, clustering interface support, and general appliance stack management.
- Worked on both systems and Solaris development as well as AJAX web development.

• Brown University—Providence, RI

M.S. (May, 2007), B.S. Computer Science and History (May, 2007 – Double Concentration)

- GPA: 4.0/4.0 (Computer Science M.S.), 3.90/4.00 (Computer Science B.S.), 3.80/4.0 (History)
- Elected Phi Beta Kappa, April, 2007
- Relevant Courses:
 - Operating Systems with Lab
 - Programming Languages
 - Dynamic Access Control and Verification
- Operating System Sandboxing
- Combinatorial Optimization
- Computer Networks

Publications and Research

- Composition with Consistent Updates for Abstract State Machines
 Joel Weinberger, Leo Meyerovich, Colin Gordon, Shriram Krishnamurthi
 International ASM Workshop '07
- Verification of Web Programs, Spring 2006–Summer 2007
 - Modeling a verifiable access control system for a web based application and developed an atomic update module operator for Abstract State Machines
- Operating System Sandboxing, Spring 2006–Spring 2007
 - Developed a subject-based access control and sandboxing system for securely running potentially malicious programs
- Immersive Scientific Visualization, June 2005–December 2005
 - Designed virtual reality interfaces for scientific visualization in CAVE virtual reality environment

Projects

Operating System

 Wrote a Unix-derived operating system. Project included a full working, multi-process kernel, file system, and virtual memory

• Multiplayer 3D Real Time Strategy Game

- Developed the architecture and logic of a networked real time strategy game on a five person team

Other Work Experience

- **Intern Software Engineer**, *VMware*, *Summer* 2006: Intern in the VMware ESX Core Kernel group. Developed shared memory infrastructure and additional signal handling capabilities.
- Course Developer, *Brown University, Fall 2005*: Designed lectures, created course material, including homeworks, projects, and labs for new Computer Security course
- **Teaching Assistant**, *Brown University*, *Fall 2005 present*: Hold office hours, lead lab sections, create and grade assignments for Computing Systems, Computer Security, and Operating Systems, courses
- Lab Consultant, Brown University, Fall 2005 present: Support over 70 workstations (Linux and Windows)

Technical Skills

- Computer Systems: Unix, Linux, Windows
- Programming Languages: C/C++, Java, Scheme, JavaScript

Interests

• Rock Climbing, Tap Dance, Road Biking, Skiing (alpine and water), Ultimate Frisbee, Basketball, History