

Nathaniel Lanza

email nlanza@premodern.org
address/phone *available on request*

profile Eight years experience designing, building, and debugging complex networked servers. Six years experience shipping production server and application code to a variety of customers. Proficient with Macintosh and UNIX development at both user and kernel level, and comfortable with working under time pressure to meet changing customer requirements.

experience **Software Engineer**
Apple, Inc., Pittsburgh, PA 2006-present
Part of the Productivity Engineering team inside the Applications division, building consumer productivity software in the iWork suite. Designed and implemented features and infrastructure components for the 1.0 release of Numbers in the iWork '08 release.

Software Engineer
Panasas, Inc., Pittsburgh, PA 2001-2006
Designed, implemented, and maintained cache coherency protocols for a high-performance distributed network filesystem, as well as handled various performance and stability projects for the Panasas ActiveScale File System (PanFS) server and DirectFLOW filesystem client products. Additional projects include profile-driven system analysis and tuning, increasing the system's scalability, improving crash recovery, implementing write-ahead metadata logging, and diagnosing and solving customer crashes and performance issues.

Research Programmer
Parallel Data Lab, Pittsburgh, PA 1998-2001
Implemented a Linux kernel filesystem client for the EDRFS object-based networked filesystem, supported the EDRFS server, and built test suites for the NASD object based disk prototype. Designed and implemented a memory-backed SCSI passthrough device in the FreeBSD kernel for simulations and an iSCSI client and server for Linux and FreeBSD. Wrote tools for use in filesystem aging research and access pattern simulation.

Systems Programmer
Carnegie Mellon University, Pittsburgh, PA 1996-1998
Developed tools for administering the computing infrastructure at the School of Computer Science. Projects included building and maintaining web and Java interfaces to the SCS internal databases.

publications *NASD Scalable Storage Systems*, Gibson, G.A., Nagle, D.F., Courtright II, W., Lanza, N., Mazaitis, P., Unangst, M., Zelenka, J., USENIX99, Extreme Linux Workshop, Monterey, CA, June 1999

education Carnegie Mellon University, Pittsburgh, PA
B.S. in Computer Science with a minor in Creative Writing, 2002

skills Extensive experience with Objective C, ANSI C, and Perl. Experience with Ruby, C++, Java, and shell scripting. Extensive experience with Xcode and the GNU software development suite (gcc/g++, gdb, gprof).

Extensive user-level development experience with Mac OS X, FreeBSD, Linux, and Solaris. Kernel development experience with FreeBSD and Linux. Experience with Mac OS X Cocoa development.