

Joseph F. Miklojcik III

56 Freemont Court
Somerset, NJ, 08873

732-754-1003
jfm3@jfm3.org

Employment

Senior Software Engineer

WINLAB, Rutgers University

September 2006 - Present

North Brunswick, NJ

- Maintained ORBIT (orbit-lab.org), a 20x20 grid of computers running Linux (2.6.x, netfilter), used for performing wireless network research. Wrote RESTful web services for operating the grid (Ruby 1.8, SBCL 1.x, MySQL 5.x, Postgres 8.x). Virtualized experiment control infrastructure (Xen 3.x). Wrote firmware for second generation hardware (C99, uIP, ARM, GCC 4). Wrote 3D console for visualizing real time experiment results (C99, OpenGL).
- Provided basic computing infrastructure for WINLAB, including email, web, file, and print services (Ubuntu 7, 8), Trac (9.x, 10.x), and an openMosix cluster.

System Programmer

Rutgers University

November 1997 - September 2006

Piscataway, NJ

- Led team of eight student system programmers.
- Consulted for thousands of hours throughout the University's hundreds of departments; everything from multi-year plans with \$300K budgets to amateur psychotherapy and pulling cable. (Solaris 7, 8, 9, NFS, RHEL 3, Debian 2.x, netfilter, Perl 5.x, PHP 3.x, Postfix, OpenLDAP, OpenSSL, OpenSSH)
- Designed and helped implement automated system administration tools for Solaris systems (*cfengine*, RPM, APT, NAGIOS, JumpStart, KickStart, SystemImager). With student team, maintained 700+ package repository at rpm.rutgers.edu. Wrote tools that allowed four full time system administrators to run between 100 and 200 servers for about 70,000 users.
- Administrated Solaris systems for Administrative Services (Solaris 7, Oracle 7x, 8x, ADSM, DiskSuite). Supported two DBAs and four Developers in traditional SA role on systems with tens of thousands of users. Devised disaster recovery plan. Passed University audits, and wrote "best practices" document.

Software Engineer and Technical Writer

Pipeline Associates

May 1995 - October 1997

Parsippany, NJ

- Wrote paper handling code for Powerpage, a Postscript interpreter (C89, C90, Postscript L2/L3).
- Consulted for Pipeline customers, integrating Powerpage into seven distinct printers. Worked closely with customer engineering teams.
- Wrote three engineering manuals for the Powerpage line of products; an Integration Guide, a Programming Style Guide, and a detailed Product Overview.
- Wrote scripts for automated regression tests, working closely with ten person QA department.

Member of Technical Staff

Unipress Software

August 1988 - August 1994

Edison, NJ

- Maintained Unipress Emacs. Wrote a portable extension language interpreter, including a garbage collector (C89).
- Ported over five software products between Solaris, HPUX, AIX, IRIX, and what seems like an endless list of other versions of UNIX during the early UNIX Workstation craze. Made C/C++ developer kits for UNIX workstations, including correctly built X11 and OSF/Motif libraries (C89, POSIX.x).
- Worked on an Instrumented C Compiler, which generated self-testing object code.
- Editor of *Unipress Emacs User Guide* and *Unipress Emacs Reference Manual*, over 1000 pages of documentation. Authored regular Unipress Technical Bulletins. (Framemaker 3.0, 4.0)

Education

Rutgers University

BA with Honors in Computer Science, 2005

New Brunswick, NJ