

Resume of Mitchell N. Perilstein

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SUMMARY

Veteran software development generalist with occasional visits in operating systems and embedded hardware. Roles have included project management, product management, domestic and offshore team management, and business ownership. Enthusiastic free/open source software advocate and contributor.

EXPERIENCE

12/14-present. Contracting, confidential Internet engagement.

2/10-7/14. Team Lead and Principal Engineer, Continuing Software Engineering, TruePosition Inc,

- Performed software archeology of a minimally documented UTDOA RF based location service product obtained from a corporate acquisition, with minimal input from its principals. We received around 2TB of assorted C++, Java, Python, etc code, email, business and engineering data to catalog. From this we reverse engineered and resurrected servers and embedded devices and performed locations. Then we heavily modified the legacy system to productize it, leading to an internet deployed server, status and data visualization layer, two new embedded platforms, and working prototype system performing locations.
- Ported our E-911 product from Solid and TimesTen databases to Postgres with Bucardo replication.
- Managed in house and offshore (India) software developers focused on continuing software lifecycle and improving software quality.

5/08-2/10. Manager and Principal Engineer, Sustaining Software Engineering, TruePosition Inc

- Managed 6 software engineers and 4 network engineers with a mission of maintaining fielded software releases.
- Performed administrative tasks such as timesheet approvals and purchase reqs in SAP, budget planning in Cognos
- Extensive issue triage, workflow management in ClearQuest/ClearCase, etc.
- Attended Six Sigma and Lean training from Villanova.

6/06-7/14. Senior Software Engineer, Sustaining Software Engineering, TruePosition Inc, Berwyn PA.

- Performed software product life cycle management of network based E-911 cell phone UTDOA location products. These comprised Linux, VxWorks, and Solaris embedded high availability platforms with a variety of databases, network protocols, and languages including C++, Java, Perl, sh, Python, and others.
- Interfaced with customers (cell carriers), R&D, doc, product management, sales, IOT/FOA, and deployment groups.
- Produced service packs, patches, internal procedures and customer bulletins.

11/04-6/06. Partner, ACE Technology Group, Exton PA.

- Business and technical ownership operations of a small outsourced IT provider with an innovative business model based on automation, scalability, and open source software to provide a superior product.
- Implemented open source infrastructure administration solutions for small businesses: designed systems for remote management, monitoring, and backup of customer premises equipment and centralized servers, technical writing and training for vertical markets. Extensive internal software enabled scalable automation of system administration.
- Internet services provider: hosted mail, web sites, and ASP software for a customers.
- Networking: Connected customer sites to ACE and to each other via persistent VPN.
- Services: Performed facilities and network traffic analysis audits for customers, T1 rollouts.

6/03-6/04 Independent consultant for Horizons, Inc, Rapid City SD.

- Designed, implemented, and installed a distributed web based intranet project workflow management system for an engineering photogrammetry company.

9/02-6/04 Independent Consultant for Black Hills Central Railroad, Hill City SD.

- Designed, implemented, and installed a web based distributed reservation system for a tourist railroad.

3/00-9/02. Software Architect, Hitachi Storage Software Inc, (nee Comstock Systems Corp), Mountain View CA.

- Secure SSL/TLS (secure socket) authentication and token transaction processing API and clients.
- Solaris, Irix, and Linux resource management agents.
- NAS and SAN storage area network management and reporting software

- Intranet UI built on Webmin and RRD tool.
- Built intranet unit testing system.

2/99-3/00 Senior Software Engineer, Avant! Corporation; Fremont, CA.

- VTIP-XL/VHDL (VHDL parser/analyzer toolkit) and VFormal (logical design equivalence checker) maintenance and enhancement.

10/97-1/99 Senior Software Engineer, Abstract Inc. (Previously Abstract Hardware Limited, subsequently Perseus Design Systems), Fremont, CA.

- General packaging, design, and maintenance tasks for the end user CheckOff equivalency and model checking formal verification tools for VHDL, Verilog, and EDIF.
- Served as the technical liaison to our partners Siemens ZT and Interra Corp.
- Provided HDL frontend services for Siemens ZT, Munich.
- Implemented a distributed configuration management, build, and testing infrastructure to support development across four offices.

6/93-9/97 Senior Software Engineer, Compass Design Automation, Inc.; Columbia, MD.

- VFormal/Verilog project. Designed and implemented Verilog analyzer from scratch as frontend processor for formal verification tool. Debugging tasks in FSM compiler.
- VTIP/Verilog project. Repackaged the Cadence OpenHDL Toolkit for resale by porting its object base to VTIP. Administered beta test program, maintained software. Provided technical support and customer training sessions for product and source code sales.
- COMPASS Scout simulation project. Maintenance, packaging, GUI implementation, customer support, source sale packaging and training.
- Wrote X/Motif interface for a high level synthesis product.
- VTIP/VHDL and VTIP-XL/VHDL products. Ported and maintained. Maintained a VHDL test suite.
- Internal Toolbox. Initiated reuse methodology of an internal common library. Implemented an SGML documentation system for it.
- Miscellaneous. Wrote production system for tape and license management. Wrote internal debugging browser for VTIP and Emacs.

3/91-6/93 CAD Language Systems, Inc. Rockville MD and Columbia, MD

CAE software engineer. (Purchased by Compass)

- Maintained Retargetable VHDL Code Generator and its test kernel. Developed X11 (Athena) user interface for the VHDL Learning Kit and the VHDL Modeling Tool. Maintained VHDL Analyzer.
- Manager, VTIP/Verilog. Software development project. Staffing varied from one to five persons. Performed administration, scheduling, marketing support, design, and development tasks.
- System administrator. Maintained development network (consisting of Sun workstations and various porting platforms), OS and engineering support software.

1/90-12/90 d/b Business Systems, Inc. Cleveland, OH

- Consultant and contractor for legal office Unix systems. Performed requirement and specification analysis, acquired, configured and installed the systems, and trained users.

5/89-12/89 Cumulus Corp, Cleveland, OH

- Staff engineer. Designed mountings, enclosures, and interfaces for disk drives and other peripherals. Wrote hard disk device drivers, partitioning software, and GUI using Mac toolbox.

1/89-5/89 CWRU, Computer Engineering Dept. Cleveland, OH

- Department technician. Workstation and OS maintenance, system administration, and user support.

9/88-1/89 AI-Ware, Inc. Cleveland, OH

- Applications programmer. Maintained neural network simulation software and wrote Windows GUI.

DOMAINS

- Roles: product management, project management, product definition, architect, API designer, developer, customer interface
- Domains: EDA, Telecom, internet, commerce, enterprise IT, open source, data visualization, privacy, web/LAMP//MVC stacks
- Development: TDD (both ways!), Agile, offshore,
- Devops: sysadmin, network, wireless, server, database, concurrency
- EDA: Gate synthesis, formal verification, compiler optimization

ENVIRONMENTS

Unix: SunOS/Solaris IRIX, HP/UX, DG/UX, Ultrix, AIX, Domain/OS, CLIX. VMS, RSX-11, Linux, Windows, Mac, Emacs, Apache, Nginx, ClearCase/ClearQuest, Git, CVS, GNATS, Pure*, valgrind, CGI, FastCGI, Gerrit, Hudson, Jenkins, routers, switches, packet sniffers, protocol analyzers, API design, OpenSSL, encryption, authentication, PKI, docker, AWS, Xen, MySQL, Postgres, Solid, TimesTen, Oracle.

LANGUAGES

C/C++, Java, Lisp, Scheme, ML, Pascal, Prolog, ML, APL, Perl, awk, python, PHP, javascript, sh, HTML, CSS, XML, SQL, Erlang, VHDL, Verilog, EDIF, LDIF, etc. etc.

EDUCATION

2010 Certified Outsource/Offshore Project Managers (COOPM) training.
2010 Villanova University. Six Sigma Green Belt and Lean Six Sigma training.
1997 Cycle-based simulation tutorial, IVC'97.
1993 Behavioral modeling in Verilog tutorial, IVC'93.
1988 Case Western Reserve University; Cleveland, OH. B.S., Computer Engineering.
1991 Case Western Reserve University; Cleveland, OH. M.S. work, Computer Engineering
1994 Systems Testing and Quality Assurance seminar
1991 VHDL training course by CLSI

PUBLICATIONS

Mitchell Perilstein, "Mixed HDL Simulation", Proceedings of the
International Verilog HDL Conference, Santa Clara, CA, March 1993.

STANDARDS ACTIVITIES

VHDL Initiative Towards ASIC Libraries, IEEE VHDL Shared Variable Working Group. OVI Verilog Language Technical Subcommittee. IEEE standard 1364-1995 Verilog Hardware Description Language.

OTHER ACTIVITIES

Contributor to Bucardo, CVS, GCC, Emacs, PEAR, and various other GNU, Linux, and open-source software projects. Board of Directors, Habitatat for Humanity. Director of rural ambulance service. EMT-I and Red Cross CPR instructor, Scuba, FAA private pilot-glider, student single-engine land.

REFERENCES

Available on request.
