

Adam Epstein

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OBJECTIVE:

A systems engineering/management position that utilizes sound technical judgment and intuition developed through broad practical experience with financial, telecom, and high-tech firms.

SUMMARY:

- Extensive background in software architecture, design, development, integration, troubleshooting, and system management.
- Substantial Solaris/SunOS, Linux, and other UNIX systems engineering background. (Sun Certified - SCSA, Solaris 8).
- Comprehensive software development experience in C, C++, Java, and other languages.

EXPERIENCE:

Ontash & Ermac Inc.

- Administered the Solaris and Microsoft based server infrastructure for a mid-sized networking products company.
- Integrated SpeechWorks speech recognition software, multi-threaded OO C++ telephony middleware, and Intel/Dialogic T1 voice hardware used in the Linux based real-time call processing component of a distributed communications system.
- Migrated SpeechWorks real-time speech recognition software from NT to Linux and SCO UnixWare7. The software is implemented in C and C++, and includes support for Intel/Dialogic analog and T1 computer telephony hardware.
- Supervised software engineers responsible for validating SCO UNIX software support for several Intel/Dialogic analog and T1 telephony boards. Managed activity required for test plan creation and execution, and report generation.
- Implemented, in C, hardware prototyping and diagnostic software for a multiple processor PBX integration card. The software verifies proper function of the card's Intel CPUs, Motorola DSPs, custom ASICs, and PCI bridge. *2000-Present*

IBM Thomas J. Watson Research Center

- Designed and developed, in Java 1.2 under Linux, Object Oriented components with an intuitive API that abstracts IPC in a distributed system used to model interaction between autonomous intelligent agents.
- Created a package of Java Swing classes used to implement an agent activity display and control GUI. *1998-1999*

Graduate Student, Information Networking Institute, Carnegie Mellon University

- Architected and implemented an OO Java framework for distributed fault-tolerant ACID transaction processing. The framework includes packages that provide remote object access and location transparency, enhanced object locking functionality with deadlock prevention, object persistence, and basic preemptive thread scheduling.
- Worked with vendors and research staff to specify high availability enterprise class Sun hardware for the Alpha trial of a secure payment system for online purchases. Installed, configured, and administered networked Solaris and HP-UX systems.
- Thesis - An implementation and evaluation of the IETF Mobile IP Internet Draft. The implementation included Linux support for agent discovery, mobile node registration, and IP packet tunneling, and demonstrated transparent routing of IP packets to mobile nodes by home and foreign agents. Evaluated protocol scalability, efficiency, and security. *1996-1998*

System Management Arts Inc.

- Refined and extended C++ classes which model network entities and provide them with a unified management interface. Revised APIs using limited polymorphs to allow RPC access transparency. Created subclasses to model SNMP MIB objects.
- Implemented (under Solaris) C++ framework classes to be used in the Iridium satellite network management system. *1994-1995*

Tribase Systems Inc.

- Designed and built (in C under SunOS) the distributed systems infrastructure for a real-time cellular phone fraud detection prototype. The architecture uses shared memory and UDP socket based inter-process communication to distribute call validation requests to multiple processors and hosts.
- Specified and administered Sun SMP server hardware for use in the fraud detection prototype.
- Provided UNIX expertise to software engineers who were migrating large mission-critical Prime based legacy production systems to SunOS platforms, and assisted with the configuration and administration of SunOS systems.
- Created a Primos emulation suite that facilitated efficient conversion of legacy Prime CPL scripts to SunOS csh scripts.
- Debugged numerous applications during conversion from Primos Fortran and CPL into C and csh under SunOS. *1990-1993*

Harmony Trading L.P.

- Architected, and implemented in C, a highly available, subscription based ticker-plant and real-time data delivery system that distributes multi-vendor market data feeds and in-house data via TCP sockets, RPC, and shared memory IPC.
- Deployed and administered a network of Suns on the trading desk, and the AMEX and CBOE exchange floors. *1988-1989*

Bear Stearns & Co. Inc.

- Created operations support tools including a Korn shell script fault recovery system for nightly production runs. *1987-1988*

Fifth Generation Computer Corporation

- Wrote software to integrate an AT&T DSP32 into each node of the Intel 8751 based DADO multi-processor parallel computer, and developed (in C and assembler) hardware diagnostics and kernel modules for the Motorola 68020 based DADO.
- Managed a network of Sun3 and AT&T 3B2 systems. Configured NFS, NIS, nightly backups, and UUCP based email connectivity. Installed application software packages and kernel patches. *1985-1987*

EDUCATION:

MS, Information Networking; Carnegie Mellon University, 1998 / BA, Computer Science; Columbia University, 1985