

Andrew W. Morrow

OBJECTIVE: A software development position for an Internet-based product applying object-oriented methodologies, preferably targeting cross-platform deployment.

SUMMARY: 20 years of experience in large software development projects, with an emphasis on object oriented systems, multimedia, and cross-platform functionality.

Software languages: C, C++, Java, Perl, Python

All versions of Microsoft Windows and commercial versions of UNIX and Linux and scripting (csh, sh)

Databases: Oracle, JDBC

EXPERIENCE

TUMRI 2006
Network Engineering – Contracting
Implemented an IOS firewall with an IPSec VPN to inter-operate with third-party home-based gateways.

BLACK TULIP SYSTEMS 2004-2006
Software Engineer
Integrated and performed critical release work on an enterprise document search tool for Linux and Windows, including programming WIN32 integrations.

NOUVEAU SYSTEMS 2002-2005
Software Engineer
Designed and implemented a J2ME/SSL secure client for the Nouveau Alliance system to provide secure connectivity between wireless platforms and the Alliance server. Designed and implemented an FTP server to provide new network connectivity solutions from copiers to a web-based document management product. Designed and implemented a Java JMF-based videoconferencing system for Alliance. This work led to my integration and contribution of the vicH.263 protocol to the OpenH323 Project (the basis for Gnome Meeting, an open-source alternative to Microsoft's NetMeeting). Performed majority of systems management tasks for all platforms.

BLAZE SOFTWARE 1997 - 2001
Software Engineer
Maintained and released Elements Environment on six UNIX platforms, MS Windows and VMS. Consolidated build procedures across all UNIX platforms and trained new engineers in the build process. This product is a comprehensive C/C++ development environment offering the industry-standard business rules engine (formerly known as Nexpert), a GUI builder, database access and web components. The release engineering environment is very demanding for several reasons: non-core components are runtime options and dynamically invoked as shared libraries; the C++ product API is not just wrappers; both an API and scripting language are provided. Diagnosed build and deployment problems with testing Java based product, Advisor, in application servers and on a wide variety of platforms including many UNIX, MVS, AS/400 and Compaq Nonstop Kernel. Participated in system management, network, firewall, UNIX email, database, web servers and other IT infrastructure as needed.

RADMEDIA, INC. 1995 - 1997

Software Engineer, Network Manager

Key developer for PowerMedia and ScreenPlay, RadMedia's web multimedia presentation products through three major releases on Windows95, WindowsNT, six commercial UNIX platforms and Macintosh. Worked in all areas of PowerMedia including GUI user interface, object store, content import, Web library, rendering and desktop integration.. Developed audio drivers for RadMedia's ScreenPlay product on six commercial UNIX platforms. Acted, in addition to my software development assignments, as network manager, web master and lead systems administrator.

SYBASE, INC. / GAIN TECHNOLOGY, INC. 1992 - 1995

Software Engineer

Developed the platform layer of Gain's object-oriented multimedia application authoring systems, Gain Momentum and Gain Exposure, on five commercial UNIX platforms and VMS. Assisted in the Windows/NT port of Gain Momentum. Implemented UNIX audio drivers and shared library access (similar to Java native methods) for Gain Momentum and audio drivers for Gain Exposure. Gain Momentum was implemented in C++, using Objectivity/DB (see below) for its database.

OBJECTIVITY, INC. 1990 - 1992

Member of the Technical Staff

Developed the platform layer of Objectivity's object-oriented database management system, Objectivity/DB, for VMS. Resolved porting issues for inter-process communications (DECnet and TCP/IP), simultaneous files access (RMS and NFS), GUI (Motif), the in-house port of a C++ compiler (cfront), build procedures and install procedures.

STANFORD TELECOMM 1990 (4 months)

Software Engineering Contractor

Implemented the VMS and UNIX communications layer for a satellite communications planning system for the US Army.

SPACE TELESCOPE SCIENCE INSTITUTE 1987 - 1990

Software Engineer

Enhanced the planning and commanding software subsystems of the science ground system for the Hubble Space Telescope. Identified and resolved vendor software and system inconsistencies and accomplished significant system performance improvements on VMS.

ELECTRONIC DATA SYSTEMS 1985 - 1987

Systems Engineer

Implemented network features General Motors' existing VAX/PDP/PLC manufacturing real-time control communications system.

EDUCATION:

Chemical Engineering, B.S., 1983, Rensselaer Polytechnic Institute, Troy, New York

PUBLICATION

Implementing Security for Wireless Collaboration

A. W. Morrow, A. Ito, Y. Watanabe

6th World Multi-conference on Systemics, Cybernetics and Informatics (SCI 2002, Orlando Florida, iisc.org)