Aaron C. Birenboim
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Experience:

4/01 to present **Contract Software Engineer**

Upgrades and maintenance of UN*X software in IDL, PV-Wave, Perl, C and C++ under Solaris, Tru64 UNIX, LINUX, VxWorks and Windows using Oracle, PHP, and Apache WWW servers at White Sands Missile Range with Applied Technology Associates.

Maintenance of audio watermarking software on Windows using VC++ and Borland C++ builder.

Developed laser data analysis application in IDL/Windows for Boeing-SVS.

10/00 to 6/01 **Signal Processing Engineer, Blue Spike**

Developed digital image and audio watermarking software in C++, C and IDL under Windows and Linux.

7/00 to 10/00 **Senior Software Developer, Essential Communications**

Maintenance of device drivers in C for HIPPI networking cards under Solaris and AIX.

3/95 to 7/00 **Applied Technology Associates**

1/00 to 7/00 **Signal Analyst, Reflective Tomography Imaging Program**

Developed software for processing of LaDAR signals in IDL and C under AIX.
Continued to provide development and maintenance support for data analysis software in C, C++, Perl, WWW/CGI and IDL under Solaris, and real-time control systems development in C/VxWorks for HABE/ATP project (described below).

5/99 to 12/99 **Computer Scientist, Adaptive Optics**

Developed software in C for real-time VME systems using custom hardware with a SunOS host. GUI programming used Motif for SunOS and some work with VC++ and MatLab for Windows console.

3/95 to 5/99 **Systems Analyst, High Altitude Balloon Experiment** (HABE)

Developed software in C, C++, Perl, WWW/CGI IDL, and scripting under Solaris, VxWorks and ParallelC for data analysis, archival, real-time data acquisition and controls.
Provided software development and maintenance support for similar data analysis and management systems installed at WSMR.

8/94 to 2/95 **Software Developer, Zirkle Wells Software Group**
(Sold to SkyConnect which was sold to NCUBE)

C and C++ programming, MPEG-2 systems coding standards, Novell UNIXWare administration, and Informix DBA

5/91 to 8/94 **MTS Math/CS, Hughes Information Technology Corp.**
(Now Raytheon Information Technology Company)

Development of software in C, C++, IDL and PV-Wave for use in weather satellite groundstations.

Education:

9/89 to 12/90	Georgia Institute of Technology M.S., School of Electrical Engineering Major : Digital Signal Processing	GPA 3.7
9/85 to 5/89	University of Southern California B.S.E.E., Cum Laude	GPA 3.8

Computer Skills:

Expertise in C++, C, perl, HTML, CGI, UNIX, SQL Databases, Embedded Systems, and VxWorks. Highly skilled with a variety of analysis and visualization tools such as IDL, PV-Wave, Matlab, Mathematica. Well grounded in software engineering practices and Object Oriented design. Familiarity with many other operating systems and programming languages.

Publications and Awards:

Awarded ATA Technical Employee of the Year, 1998.

``Performance of Data Compression Applied to Satellite Data'',
American Meteorological Society proceedings, 1992 conference.

``Principle Components based clustering for vector quantization of color images'',
Cleared for publication by Hughes Aircraft

Security : DoD Secret, SSBI debriefed 8/94