# **John Ashmead**

Ashmead Software & Consulting, Inc.

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# <http://www.ashmeadsoftware.com/>

**Summary:** [Design, build, and enhance relational databases](http://www.ashmeadsoftware.com/relational.htm) in a variety of sectors with particular emphasis on reliability, performance, and ease-of-maintenance.

**Sectors**: Media & Advertising, Financial Services, Health Care, Telecom, Publishing, Education, others.

**Software**: Databases: MS SQL Server, MySQL, PostgreSQL, Informix, Oracle, & others.

Languages: SQL; C, C++; Perl, PHP; JavaScript, HTML, CSS; Unix Shell.

Operating Systems: UNIX/Linux, MAC OSX, Windows, DOS.

2014 DBA for PostgreSQL & other databases at Nistica, an optical manufacturer.

2001-2013 Major contracts (two or more engagements for each):

*West Chester Area School District*. Specified, designed, built, & tested distributed operational & student tracking databases using SQL Server 2008 & 2005, DTS, web services, and related technologies for a school district with 12,000 students.

*Huntleigh Healthcare*. Developed EDI-based automated order & invoicing system. Ported PICK system to Informix. Reduced time to get new report out from two weeks to one or two days.

*Haverford & Bryn Mawr Colleges.* Built web-based scheduler & tracking system for students. System optimized for both class slots & student preferences.

*1838 Investment Advisors*.

Automated stored procedure generation eliminating 90% of development effort. Built business intelligence datamart in SQL Server to support corporate decision making. Ported SalesLogix Customer Relationship Management (CRM) system written in Oracle 9 PL/SQL to SQL Server 2000/Transact-SQL (both on Windows 2000). (Improved upload time from three days to fifteen minutes.) Designed and developed tax-sensitive investment management software running on Solaris using C++, Perl, SQL (reduced time for portfolio adjustments from several days to under an hour). Automated client data feeds using C++, Perl, and SQL achieving load rates of 100 million rows in approximately an hour.

1993-2000 Starnet & Radius Communications.

Automated existing television channel using Scala software running on virtual Amiga OS emulated on Windows NT platform. Used C, Perl, SQL, Pro\*C & Oracle 8.

Designed and built Intranet reporting systems to track delivery and playback of digital video. Ran on Oracle 8 and Informix 7 databases using ESQL/C & Pro\*C, PL/SQL, Perl, and SQL. Application supported automated error reporting, allowing pre-failure service of remote field equipment and improving service levels from 60% to 90%.

Enhanced existing cable television marketing broadcast system, multiplexed existing single output channel to six. Used Informix 7 and Oracle 8. Written in C, Perl, ESQL/C, Pro\*C, SQL. This let the client expand a single revenue stream into six, improve customer retention performance, and open up new marketing opportunities.

Project leader for construction of digital video system. System streamed video via satellite to 40+ headends.

Enhanced performance, reliability, and functionality of main Starnet database. Performance rewrite of C code reduced machine loads from 100% to 30%. Simplified DOS C code (reducing code base from 40,000 lines to 12,000), reducing maintenance costs and improving reliability.

1987-1995 Medical Laboratories.

Upgraded and maintained Informix systems for tracking medical laboratory and billing data. Reduced code volume by a factor of 12.

Automated statistical analysis of certain blood tests, making possible new screening procedures for Down syndrome that can eliminate the need for amniocentesis in pregnant women. New test eventually generated 60% of the laboratory’s revenue.

Designed and built a cytogenetics database to track medical and billing information. More accurate tracking of laboratory work reduced exposure to errors and litigation. Automated billing enhanced yield; helped reduce average collection time by 15 days.

1984-1987 Bellcore. System administrator & developer

Responsible for a computer site with approximately 2000 users, 26 mini computers running UNIX, five system administrators, and two shifts of operators.Designed, wrote, and installed tape management system (in Empress). Automated procedures for installing a new release of unix, reducing upgrade time from 16 hours to 45 minutes.

*1982-1983 Centrum, Inc*. Production manager

Founding member of new scholarly and scientific press: developed typesetting production system from scratch. Reduced time to produce individual issues from four to six weeks down to three days.

Information on earlier experience, other contracts, and precise dates available on request.

**Education:**

*1977* MA in Physics, Princeton University.

*1972* BA in Physics, Harvard University, *summa cum laude.*

**Other:**

*2011-2014* Physics dissertation at *University of Pennsylvania*, on “Time & Quantum Mechanics”. Various talks on this at physics conferences.