

# Jeffrey S. McArthur

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## Professional Profile

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### ***Senior Management-Information Technology***

Expertise and experience in establishing the processes and procedures transforming information technology organizations into predictable, sustainable, and measurable high performance teams delivering quality products on time and on budget. Insights from a wide background including medical devices, healthcare, publishing, embedded systems, broadcast television equipment, educational software, mobile software, and video games. Over ten years hands-on experience writing, debugging, and deploying complex applications. Knows when to jump into writing code and when to delegate. Proven ability motivating and leading development teams.

**Business Strategies • Infrastructure • Software Development  
Technology Initiatives • Mentor • Meet Critical Deadlines  
Project/Product Management • Data Warehouse**

## Professional Experience

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**Ryzing** 2010 to Present *Philadelphia, PA*  
Ryzing is a venture-backed social gaming company focusing on the development of games for Facebook with real cash and prizes.

### ***Director of Software Development***

Responsible for the completion of the game engine, data access layer, database, testing and setup of the live deployment configuration and final deployment of a stable version. Significant hands on development introducing comprehensive logging using Log4Net, Test Driven Development (TDD) using NUnit and continuous integration using Hudson.

- Planned, documented, and hands-on implementation of the alpha, quality assurance, and production systems on Amazon's Web Services (AWS Cloud).
- Implemented continuous integration system using Hudson. Automated the costly and time-consuming task of rolling out new releases of software.
- Planned and implemented a comprehensive monitoring system using Nagios.
- Restructured the version control archive in SVN to support branching and tagging following best practices. Implemented automated tagging of each release.
- Defined and implemented backup, restore, and disaster recovery plans.
- Drafted Statement of Work documents and coordinated with outside vendors.
- Hands-on development adding logging throughout various applications.
- Improved the deployment time and ability to debug problems by introducing and installing open source tools: curl, grep, find, tail, rsync, etc.
- Worked with the outsourced development team in India on a daily basis.
- Planned, documented, and implemented the process of scaling the production environment to support hundreds of thousands of simultaneous users.
- Planned and documented the process of continuing operation even during failure of a system.

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## Professional Experience *(Continued)*

### Music Choice

2009 to 2010

Horsham, PA

Music Choice programs music and produces music-related content for digital cable, cell phones, and cable modem subscribers in the US.

#### **Senior Software Development Consultant**

Responsible for the design and implementation of significant improvements to the architecture of the domain and repository used by the high traffic websites of Music Choice. Significant hands on development using Domain Driven Design (DDD) and Test Driven Development (TDD).

- Solved performance issues with the enterprise service bus (ESB) by using domain driven design and test driven development to create a multithreaded predictive caching layer making the web site more than forty times faster.
- Led changes in the development process for the web development team by introducing logging with Log4Net, test driven development using NUnit automated testing, and mocking.
- Introduced and trained developers in the use of log processing tools including grep and tail.
- Hands-on leadership introducing code documentation tools including Sandcastle.
- Provided technical support and created API documentation for third party vendors implementing mobile websites and applications.
- Integrated SMS aggregation with the back office enterprise service bus (ESB).
- Successfully used both WSDL-first and code-first development using Microsoft Windows Communication foundation (WCF).
- Created mock implementation of the enterprise service bus (ESB) allowing comprehensive integration testing without the affecting the limited ESB resources.

### National Digital Medical Archive (NDMA)

2006 to 2008

Berwyn, PA

NDMA designs, develops Software-As-A-Service intelligent infrastructure platforms for data management in Healthcare.

#### **Director of Software Development**

Directed all aspects of the software development department including management of the daily build system, version control system, and development VM servers.

- Expanded and maintained the master project plan for the company providing upper management a detailed view of the progress of development.
- Grew the information technology team from ten to fifteen in less than a year selecting the brightest and best candidates through a detailed interview process.
- Maintained discipline of the information technology teams. When needed developed individual performance improvement plans.
- Implemented a responsive system development life cycle based on the Agile methodology and Scrum using incremental and iterative strategies quickly and efficiently responding to changing business requirements and technologies.
- Enabled increasing deployed systems by 25% by enforcing quality control procedures.
- Organized the functions of the software development group including implementing version control, daily build, unit testing, configuration management, and release processes.
- Implemented code reviews and coding standards objectively identifying components needing refactoring enabling the company to plan for continual quality improvements.
- Developed training plans, created training materials and examples. Taught classes on software development tools and techniques.

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## Professional Experience *(Continued)*

### Independent Consultant

2004 to present

*Exton, PA*

Years of hands-on experience developing, managing, and leading development using .Net, C/C++, C#, Java (J2EE), and PHP on Linux, Windows and mobile platforms. Extensive hands-on SQL experience with Microsoft SQL Server, MySQL, PostgreSQL, and DB2. Expert with XML, XSLT, XHTML, and content transformation. Years of experience drafting proposals and making technical presentations resulting in winning numerous contracts.

- Awarded Top Coder status by Rent-A-Coder. Holds a "superb" rating. Currently ranked in top one percent of over a quarter million coders.
- Designed, coded, and implemented beta version of the high traffic site [www.masterseek.com](http://www.masterseek.com) including support of multiple languages. Masterseek.com averages over 14,000 visits per day.
- Managed high traffic website with over 80,000 hits per day.
- Developed significant improvements to Quakk, an open source Twitter client for Windows Mobile phones.

### ATLIS Systems, Inc.

1991 to 2006

*Silver Spring, MD*

ATLIS created custom software solutions to manage information needs of customers. DSCS acquired ATLIS in January 2009.

#### **Director of Software Development**

Dramatically expanded the programming capabilities through training and hiring. Directed all aspects of the software development department.

- Had the vision and led the design and implementation of the company's new enterprise management product line.
- Calculated the Cost-Volume-Profit analysis showing the profitability of the department.
- Ten years experience at estimating the time and effort of technical projects. Determined pricing and staffing requirements based on time and effort estimates.
- Authored proposals, requirements, objectives, specifications, pricing, and scheduling.
- Effectively used project management software to track the cost, time, and progress of projects using in-house, off-site, and offshore (India) contract programmers.
- Hands-on experience with automated testing tools for graphical user interface testing. Developed full regression test suite for application providing complete coverage of all features.
- Mandated and supervised the daily build procedures.
- Delivered technical demonstrations and presentations to existing and prospective clients.
- Designed and implemented data warehouse for global 1000 company. Hands-on coding, management, and leadership in the transformation and loading of over one hundred separate source databases.
- Managed the development of multilingual database: English, French, Italian, German, Spanish, Portuguese, Dutch, Russian, and both Simplified and Traditional Chinese.

## Education

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University of Phoenix, Business Management. BS with honors.

University of Utah, Mathematics and Physics. Dean's List. Honor Society.

## Military Service

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U.S. Army, Sergeant, E-5. Honorable Discharge. Good Conduct Medal

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## Technical Competencies

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Experienced software development leader. Hands-on experience developing, managing, and leading the complete software development life cycle of distributed, network-based, software solutions on Windows and Linux platforms. Proficient in: .Net, AJAX, ASP.Net, C#, C/C++, Delphi, Java, JavaScript, Lisp, PHP, Python, VB.Net, Flash, AS3, Silverlight, XAML, WCF, WPF, XNA, NUnit, SQL, MySQL, MS SQL Server, PostgreSQL, DB2, Oracle, UML, HTML, DHTML, XML, XSLT, CSS, SGML, multithreaded applications, VMware, Rackspace and Amazon clouds, extract-transform-load (ETL), project management tools, compiler/language design tools (Lex/Yacc), and Agile and extreme programming methodologies.

## Recent Presentations and Publications

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- "Importance of Inspections in Outsourced Programming" presented at The Third International Conference of Software Process Improvement in Orlando, Florida on March 5th, 2006.
- "Calculating Deciles with Microsoft SQL Server without Using Temporary Tables" in *Journal of Conceptual Modeling*, Issue 33, September 2004. This article is available online at <http://www.inconcept.com/JCM/September2004/McArthur.html>
- "Managing T<sub>E</sub>X Software Development Projects" in *TUGBoat, The Communications of the T<sub>E</sub>X Users Group*, Vol. 20, No. 3, September 1999.
- "Developing Database Publishing Systems using T<sub>E</sub>X" in *TUGBoat, The Communications of the T<sub>E</sub>X Users Group*, Vol. 19, No. 2, pp. 188-194, March 1998. This article is available online at <http://www.tug.org/TUGboat/Articles/tb19-2/tb59mcar.pdf>
- "Circles" in *Compute!* Vol. 5, No 7, pp 165-168, July 1983. Reprinted in *Compute!'s Third Book of Atari*, pp 153-160, 1984.