

Joseph Fitzgerald (joe@platinumcoded.com)

Mr. Fitzgerald is a Technical Architect and Senior Software Engineer with seventeen years of experience in a variety of industries including Financial Services, Insurance, Healthcare, and Defense. Repeatedly demonstrating successful leadership throughout the full software development lifecycle, Mr. Fitzgerald has delivered quality software on time and within budget. Currently, Mr. Fitzgerald specializes in Java and iPhone Objective-C development.

In 1995 Mr. Fitzgerald was employed as a software developer at www.Economy.com (formerly RFA) for two years. Then, Mr. Fitzgerald was employed as a software developer/consultant by American Management Systems (now CGI) for five years. He left AMS with six other consultants to become a founder at Avenity Inc. where he managed projects, developed software, and consulted clients for five years. In May 2008 Mr. Fitzgerald left Avenity to found Platinum Coded LLC www.platinumcoded.com.

Mr. Fitzgerald has also founded, grew, and sold his share of Fitness Giant LLC, an online fitness equipment retail store www.fitnessgiant.com.

The Government of the United States has granted Mr. Fitzgerald active Top Secret security clearance. He is a citizen of the United States, and resides in McLean, VA with his wife and three children.

Projects

Client: Ares Systems Group
Project: SWARM
Date: 2009-Present
Employer: Platinum Coded

SWARM is a modeling and simulation tool for electronic warfare that is sponsored by the Joint Improvised Explosive Defeat Organization (JIEDDO). The main features include modeling blue force compatibility as well as jammer effectiveness in real world terrain. Mr. Fitzgerald is the technical architect and lead developer for SWARM. The application is written in Java and uses the NASA World Wind 3D globe visualization component. The application distributes jobs to a Matlab service through a JMS queue. Currently, SWARM uses an Oracle database, however the code uses Hibernate and so it is possible to switch database providers with minimal effort. Previously, SWARM had been deployed with a MySQL database.

Client: Ares Systems Group
Project: RaptorX Plugin for NSW
Date: 2008-2009
Employer: Platinum Coded

RaptorX is a framework built on top of NASA World Wind. Mr. Fitzgerald was one of the first developers to use this framework, starting with pre-1.0 builds. The Java plugin for the Navy Special Warfare (NSW) communicates with a mesh of remote devices, performs geolocation tasks, and integrates with the globe UI.

Client: Ares Systems Group
Project: RaptorX Plugin for DoD
Date: 2009
Employer: Platinum Coded

Having a lot of similarities with the previous RaptorX plugin project, Mr. Fitzgerald refactored the code into common services that he reused inside this new plugin for the Department of Defense.

Client: Decision Tree Media
Project: Web updates
Date: 2008-Present
Employer: Platinum Coded

A lead-generation service company, Decision Tree Media embeds educational guides directly inside of their clients' websites. Mr. Fitzgerald provides system administration and development support for the organization which employs a Linux Apache Tomcat PostgreSQL JSP configuration.

Client: Platinum Coded (internal)
Project: Baby Log for iPhone
Date: 2008
Employer: Platinum Coded

This iPhone and iPod Touch application helps new sleep deprived parents keep track of the last time they have diapered, fed, napped, and bathed their baby. Mr. Fitzgerald worked independently from the concept stage to shipping the final release. This iPhoneOS software is currently selling on the iTunes AppStore and has sold thousands of copies.

Client: Platinum Coded (internal)
Project: Hot Box for iPhone
Date: 2008
Employer: Platinum Coded

Hot Box is a number grid puzzle game for the iPhone and iPod Touch. Magic Squares, a number configuration that has been studied for millenniums, was the inspiration for this game. Mr. Fitzgerald worked independently from the concept stage to shipping the final release. This iPhoneOS software is currently selling on the iTunes AppStore and has sold over 10,000 copies.

Client: Towers Perrin
Project: SPM
Date: 2007-2008
Employer: Avenity

Towers Perrin is a leading human resources consulting and outsourcing firm. Survey Process Modernization (SPM) is a custom system that enables Towers Perrin to sell their surveys and services online. The system supports the complete pipeline of a sale from posting a product to the online catalog, through online purchasing, fulfillment, and invoicing. The system is used worldwide and interfaces with a central oracle financials system. The Java Web Application runs on BEA WebLogic and uses an Oracle database server. The system includes custom Windows services written in Java to support asynchronous processing. Mr. Fitzgerald was the project manager and technical architect for the full lifecycle of this project.

Client: Towers Perrin
Project: CAS
Date: 2003-2004
Employer: Avenity

In support of its Compensation Administration Solutions (CAS) business offering, Towers Perrin implemented an Oracle based system with both client/server and web-based components, designed for use internally at Towers Perrin, and externally by their client base. The CAS offering supports extensive market-based data analysis and reporting on compensation data for clients worldwide. The client-server components of the application were built in Visual Basic and Visual C++, and the web-components were built using J2EE patterns running in a BEA WebLogic server. Mr. Fitzgerald developed a VB GUI, Java API, reports in VSView, and web pages.

Client: Towers Perrin
Project: Disaster Recovery Plan
Date: 2006
Employer: Avenity

To help prepare Towers Perrin in the event of a technical emergency, Mr. Fitzgerald wrote a disaster recovery plan for the servers used by the Executive Compensation group. This effort involved documenting the hardware and software configuration, the steps necessary to reinstall all software, the backup schedule, the steps necessary to restore from a backup and a dependency chart to aid in the order of operations. This disaster recovery document was used by Towers Perrin in a drill to simulate a recovery. Mr. Fitzgerald was the author of this document.

Client: H&R Block
Project: Echo
Date: 2004
Employer: Avenity

H&R Block used FileNet's P8 software offering to help support their tax-return processing business. The system provided a flexible workflow and imaging environment that electronically organized the flow of tasks through the business process. The system was built in a J2EE environment using Struts on BEA WebLogic coupled with FileNet's P8 Process Engine to manage workflow and Content Engine to manage tax documents. Mr. Fitzgerald co-developed this prototype and wrote custom tag libraries to blend with H&R block's look-and-feel.

Client: Wells Fargo
Project: SeeMore
Date: 2004
Employer: Avenity

Wells Fargo implemented an integrated workflow and imaging application in support of its small-business lending business. The application supported the orderly processing of loan requests during the underwriting process through the booking and funding of the loans. The application was built on Microsoft IIS in ASP and .NET, utilizing Microsoft SQL Server and a FileNet Image Services platform for TIFF image management. Mr. Fitzgerald implemented change requests to extend web functionality including interfacing with web services.

Client: Wells Fargo
Project: Continuum
Date: 2005
Employer: Avenity

This project assisted Wells Fargo Business Banking Services in the documentation of requirements and development of a prototype of Continuum, a BPM workflow project. The BPM system is based on the FileNet P8 workflow platform as a J2EE Web application and utilized ILOG JRules and an Oracle database. The system is intended to support thousands of bankers, administrative staff, and banking operations personnel throughout the U.S. to process loans across the entire Wells Fargo business banking portfolio. Mr. Fitzgerald conducted requirements sessions with senior level clients and co-authored the requirements documents.

Client: Fannie Mae
Project: Mortgage Processing System
Date: 2001-2003
Employer: AMS

Fannie Mae undertook a \$300Mil systems upgrade project. The goal of the upgrade was to develop a technical infrastructure that readily responds to customer product innovations. The new infrastructure is comprised of three separate systems: acquisitions, servicing, and securitization. The new technical environment uses J2EE, Oracle9i, BEA WebLogic and Ab Initio for ETL. During the requirements phase Mr. Fitzgerald contributed to a requirements document for a gateway of all incoming and outgoing bulk data. During the design phase of the project, Mr. Fitzgerald developed UML design artifacts using TogetherSoft. Mr Fitzgerald designed and prototyped a J2EE notification system and an Ab Initio ETL processes. Mr. Fitzgerald authored a multi-threaded Ab Initio component interfacing with a JMS queue. Mr. Fitzgerald presented his prototype work to senior client members. Additionally, Mr. Fitzgerald played the role of Configuration Manager, using Rational ClearCase.

Client: Fitness Giant (internal)
Project: Online Retail Store
Date: 2002-2005
Employer: Fitness Giant

FitnessGiant.com is an online retail site that sells over \$1Mil in fitness equipment per year. As a founder of this company, Mr. Fitzgerald plotted the strategic business plan. He created the online retail store and performed Search Engine Optimizations (SEO) using metrics to tune the site. He tested and executed an online marketing plan directly accountable for 60% of the site revenue. Mr. Fitzgerald has since sold his ownership in the company.

Client: AMS (internal)
Project: Wireless Initiative
Date: 2001
Employer: AMS

As part of a new technology initiative, the Systems Integration group within AMS began a program to gain competency in select cutting edge areas of software development. This initiative focused on application development in the PalmOS and included writing a Palm query tool and a corresponding conduit to execute queries during HotSync. Another proof of concept involved a Palm wireless application for insurance agents to access claims in Siebel over a WAP enabled device. Mr. Fitzgerald was the sole developer for this initiative.

Client: AMS (internal)
Project: Sovera for Health Information Management
Date: 2001
Employer: AMS

This healthcare software product, originally written at American Management Systems and currently maintained by CGI, manages patient information in hospitals. The main features include electronic and scanned capture, chart retrieval and annotation, and reporting and productivity monitoring, creating a paperless work environment. The user interface is an ActiveX application written with Microsoft Visual C++ and connects to a FileNet WorkFlo back-end. Mr. Fitzgerald worked with the QA testing team to eliminate defects and incorporate new features and prepare the software to ship to hospitals.

Client: AMS (internal)
Project: Proponix
Date: 2001
Employer: AMS

Proponix, originally written at American Management Systems and currently maintained by CGI, enables banks to buy trade and supply chain finance technology as a service on a “pay as you go basis.” This project had a large power builder application that needed to be deployed using Citrix for terminal emulation. FileNet had a limitation of only allowing one user from the same computer, an obstacle for success of this software. Mr. Fitzgerald wrote an NT service that would span multiple user sessions and successfully manage multiple concurrent users, circumventing the obstacle.

Client: National Football League
Project: Game Scheduling System
Date: 2000
Employer: AMS

After Mr. Fitzgerald worked with the NFL broadcasting team to enhance their existing game scheduling system, the NFL hired AMS and Mr. Fitzgerald to create a new custom game scheduling system. Mr. Fitzgerald contributed to the proposal of the new system by meeting with senior personnel to gather requirements. Mr. Fitzgerald designed the SQL Server database using PowerDesigner and served as the DBA. Throughout development, Mr. Fitzgerald focused on the C++ objects that represented the rules for scheduling games.

Client: Providian Financial
Project: Developer Toolkit
Date: 1999
Employer: AMS

The Unsecured Spread Business division of Providian Financial commissioned a developer Toolkit intended to create a common method of performing non-business, system level tasks within newly developed applications. The Toolkit was conceived specifically to enable application developers to concentrate more time and effort on the business applications and provide functionality to aid in the transition to a new architecture. Mr. Fitzgerald authored the Messaging objects in the toolkit. The messaging piece provides a layer of abstraction for storing and transmitting data across multiple protocols including IBM MQSeries and native BSD sockets. The code was written in ANSI C++, and compiled on Windows and several derivatives of UNIX. The toolkit was delivered as a set of libraries, DLLs, and COM objects.

Client: Providian Financial
Project: Bureaus
Date: 1999
Employer: AMS

The Credit Bureaus system determines which credit card applications are accepted by applying a set of rules to credit history information. This project is the first for Providian to use the Toolkit, a previous project that Mr. Fitzgerald developed. For this project Mr. Fitzgerald wrote an object in VB to store and marshal credit bureau information. Additionally, he wrote a UNIX service to interact with the Oracle database and write batch files of credit bureau data.

Client: Providian Financial
Project: Underwriting
Date: 1999
Employer: AMS

The Underwriting system was the next stage in the pipeline for Providian Financial after the Bureaus project. This custom system applies rules to determine the amount of financial credit to extend a customer. Mr. Fitzgerald wrote the detailed design and built the windows interface portion of the project. This VB interface allowed representatives to perform reconsiderations, QA, and Test Center functionality. The application uses ADO to connect with an Oracle database, and IBM MQ Series to message with the UNIX back-end.

Client: GE Capital, First Colony Life
Project: FileNet and PegaSystems
Integration
Date: 1998
Employer: AMS

At GEFA's Fixed Annuities Service Center, Mr. Fitzgerald successfully integrated FileNet Image Management System with PegaSystems Workflow engine. He developed C code on HP-UX to establish an interface to perform database functions from an external application. During this implementation he was one of the first members of the Technology Solutions Group to work with PegaSystems and FileNet Panagon IDM. This project led to some additional work that involved transferring documents to foreign outsourcing resources, and reconciling the transfer. Mr. Fitzgerald authored the Reconcile and Transfer portions of the project using FileNet's WorkFlo Application Language interface.

Client: GE Capital
Project: Credit Card Loss Tool
Date: 1997
Employer: RFA

GE Capital hired Regional Financial Associates to create an economic model to predict losses on credit card loans and provide a tool to analyze the data. Mr. Fitzgerald worked with the economist PhD's and created an excel macro workbook to import, seasonally adjust, and report forecasts.

Client: RFA (internal)
Project: Website
Date: 1996
Employer: RFA

Mr. Fitzgerald created the first website for Regional Financial Associates (currently known as Moody's Economy.com). He served as the webmaster and evaluated first generation web server products.

Client: RFA (internal)
Project: Accounting Subscription
Integration
Date: 1995
Employer: RFA

Regional Financial Associates used Solomon software for accounting and an Access database for managing client subscriptions. Mr. Fitzgerald integrated the two databases to eliminate the faulty redundant storage of addresses and to ensure that all of the current paying customers (and none others) received publications.

Education

A.B., Economics, Princeton University, 1995.
M.S., Computer Science, Duke University 1998.

Technical Proficiencies

Languages: Java, Objective-C, C, VB, Sun Certified Developer J2SE 1.5.
Database: Oracle, SQLServer, MySQL, Access.
Internet: Tomcat, Apache, WebLogic, IIS, HTML, JSP, ASP.
Networking: Socket programming, Websphere MQ, JMS, Wireshark, Fiddler.
Operating Systems: Comfortable coding in/for Windows, Unix, iPhoneOS, OS X.