# Dalton D. Franklin

332 Ardsley Place • Nashville, TN 37215 • (615) 414-1822 • dalton.d.franklin@gmail.com

Eager, team-oriented software engineering professional whose years of experience interacting with customers and leading design/development of .NET applications and SQL Server databases predicts much contribution to your team

## **SUMMARY OF QUALIFICATIONS**

- Specific academic background for developing software as part of a team, with a successful 3.6 GPA in both Computer Science and Human & Organizational Development.
- Demonstrated talent at developing multi-tiered web applications using Visual Basic .NET, ASP.NET, JavaScript, and TSQL with Visual Studio.
- Practiced database architect with experience designing large databases and developing database functionality to maintain the database and to provide an efficient interface to object-oriented software applications.
- Certified to analyze business requirements and define solution architectures.
- Capable of contributing to architectural design by considering multiple facets of a software product.
- Proven ability to work with non-technical personnel to understand business processes in an unfamiliar field and then define formal requirements for software solutions.
- Strong communicator capable of presenting software to end users and able to create formal deliverables that describe considerations about software requirements, architecture, and user interface.

#### **TECHNICAL EXPERTISE**

#### **Software Process**

- Experience using a variety of software process models, including the Unified Process, the McConnell Model, and the Microsoft Solutions Framework
- Able to write documents in a language that non-technical personnel can understand
- Skilled at creating deliverables that precisely specify software requirements and design decisions
- Independently manages time and task performance

#### Databases

- Talented at SQL database modeling and normalization techniques
- Thoroughly experienced at developing complex stored procedures
- Capable of producing SQL Server functions that return modified data for use in queries
- Proficient at using triggers to automatically update data
- Practiced at using cursors to loop through multiple records
- Proven ability to create dynamic queries that perform different operations depending on parameters
- Has designed bulk insert procedures that insert multiple records during one transaction
- Knowledgeable about using indexes to streamline database operations

#### **Application Design**

- Thorough experience designing multi-tier applications with Data, Business Object, and UI tiers
- Practiced at Object Oriented Programming
- Skilled at eliciting and analyzing requirements from non-technical personnel
- Very knowledgeable of the .NET Framework
- Comfortable with C#, Visual Basic .NET, C++, and JavaScript

#### User Interface Design

- Educated about best practices for usability, including topics related to readability, scanability, understandability, interactivity, and data entry
- Familiar with principles of data input validation
- Performed research supervised by computer science professor regarding "User Interface Implications of Relational Database Structures"

#### WORK AND PROJECT EXPERIENCE

TerraCerta Sept 2005 – Kernel-mode and service-based authenticated execution product for controlling Current

Kernel-mode and service-based authenticated execution product for controlling, reporting, and managing executable code behavior.

## Lead Engineer / Solution Architect

- Developed diagram creation tool that integrates with Enterprise Architect<sup>TM</sup>
- Developed SQL database to store executable code catalog, policies, and incidents
- Developed C# shell-extension to simulate kernel mode behavior for product prototype
- Designed web-based user interface for execution activity reporting
- Worked with architect consultant to define requirements and high level architecture for authenticated execution solution
- Created Enterprise Architect UML sequence diagrams and natural language specifications for low level architecture
- Worked with kernel driver developer to define file filter behavior for solution
- Specified and installed development environment for 10 engineering workstations
- Differentiated relevant technical skills related to product architecture and helped to write job descriptions for new team
- Reviewed resumes and project history of potential employees and participated in active recruiting efforts
- Actively managed thirty month process of architecting, designing, and implementing commercial software product

## Metropolitan Government of Nashville and Davidson County (on contract)

Web application that implemented Content Management System for managing content versions, custom workflows, and review processes.

#### Project Manager / Software Developer

- Worked with non-technical personnel to gain thorough understanding of unfamiliar field
- Determined the need for systemized content management at Metro Nashville
- Analyzed business processes and requests for proposals and defined formal software requirements for Content Management System
- Modeled all business objects associated with process of content management
- Created SQL database tables implementing this model
- Developed user interface for Content Management
- Implemented Stored Procedures that provided data to the application
- Implemented Triggered Functions that propagated denormalized field values in order to reduce query overhead

# WiseMoogle (on contract)

Web application designed to allow players of popular computer game to create reports describing personalized game strategy based on database after completing iterative strategy questionnaires; service was integrated with PayPal.

## Project Manager / Solution Architect

- Modeled various elements of the game, including abstraction of equipment into items, properties, and constraints on properties
- Created user interface that exploited convergent iteration to force users to provide strategical priorities and displayed resulting reports
- Developed stored procedures and functions necessary to implement dynamic data queries based on parameters provided by application business logic layer
- Implemented bulk insert procedures used to stored multiple records of user strategy selections in single transaction

Jan 2005 – May 2005

May 2005 – Aug 2005

#### WORK AND PROJECT EXPERIENCE

## **Syllogistic Resources (on contract)**

May 2004 – Aug 2004

Web application that provided a Learning Management System to defense contractor.

## Lead Engineer

- Normalized SQL database provided by client
- Designed user interface for learning management system
- Developed code generation tool that generated stored procedures, data access code, and user interface for given database

## **Developer Portal (on contract)**

May 2003 – Sept 2003

Web application used to maintain traceability between requirements and application architecture and to maintain task lists associated with specific portions of application architecture.

#### Lead Engineer

- Modeled relationship between software requirements, related architecture elements, and tasks associated with architecture elements
- Created SQL database that implemented this model
- Developed user interface for developers that allowed for display and modification of these business objects

## **Simplicity Partners**

Jan 2002 – May 2004

Web application that provided computer consultants with tools to manager their business operations, including product management, proposal generation, quote creation, contact management, sales lead tracking, communication management, subcontractor management, vendor relationship management, management of accounts payable and receivable, tracking of order history, manufacturing process management, job schedule management, and product quality assurance.

## <u>Lead Engineer / Project Manager</u>

- Attempted to model the business objects and properties of the computer consulting industry
- Set up SQL database tables that implemented this model
- Designed and created a web-based user interface for displaying these business tools; interface supported dropdown menus, displaying multiple windows, and minimizing windows to taskbar
- Created stored procedures based on database and application workflow requirements

#### **Simplicity Technology Corporation**

Jan. 2001 – Dec. 2005

Computer consulting company providing computer hardware and software troubleshooting, sales, and support.

# Founder and President

- Designed direct mail campaigns to acquire new clients
- Sold and serviced computers and computer parts
- Modeled and developed database-driven website used to manage desktop computer ordering and assembly

Workplace

Networking maintenance and website describing the services provided by a computer Nov 2001

Networking maintenance and website describing the services provided by a computer consulting company and high-tech office space provider.

# Senior Network Engineer / Web Application Developer

- Maintained windows-based network for both employees and clients
- Provided troubleshooting for individual workstations managed by the company

## Website Developer

- Developed JavaScript to manage web styles and navigation
- Created layout template to provide consistent website image
- Maintained website content describing company services and products

## **EDUCATION**

# Vanderbilt University, Bachelor of Science

Human & Organizational Development Major (3.60 GPA)

Key Courses: Applied Human Development, Small Group Behavior, Leadership Theory & Practice, Intro Human Resource Development, Understanding

Organizations, Advanced Organizational Theory

Computer Science Major (3.63 GPA)

Key Courses: Algorithms, Programming Languages, Principles of Software

Engineering, Database Management Systems

Montgomery Bell Academy, High School Diploma

## PROFESSIONAL CERTIFICATIONS

Microsoft Certified Professional
Analyzing Business Requirements and Defining Solution Architectures
(Certification #70-100)