
ALISSA M. HOWELL

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Seeking a senior software engineer/architect position where I can make a significant impact. I excel at solving business problems by defining user requirements, architecting data structures and creating software. My 29 years of varied experience encompasses the full software development lifecycle in a variety of business applications. I quickly grasp core concepts and apply strong problem solving skills to meet tight deadlines.

SKILLS SUMMARY

LANGUAGES

C/C++/C#
Visual Basic
ADA
Perl

DEVELOPMENT METHODOLOGIES

DeMarco Structured Design
Extended Rational Analysis
Design Patterns
Agile, Scrum

DATABASES

Microsoft Access
Microsoft SQL Server
Oracle

OPERATING SYSTEMS AND API'S

Microsoft Windows
ADO to SQL Server
XML
LINQ
Unix

SOFTWARE TOOLS & APPLICATIONS

Microsoft Visual Studio
Microsoft Visio
Microsoft Word, Excel, Publisher, PowerPoint
Install Shield

SPECIALTIES

Relational Database Design and Development
Business and User Requirements Analysis

PROFESSIONAL EXPERIENCE

SHIELD TECHNOLOGIES LLC, WOODINVILLE, WA

2005 - PRESENT

CO-FOUNDER & CHIEF TECHNOLOGY OFFICER

Provided all software architecture, design and development of a Risk Management engineering analysis relational database for use in the Medical Industry. This system, marketed by Shield Technologies, is the only solution of its type in the market today. It provides revolutionary capabilities to entities (all organizations and activities) to establish compliance with both international and federal regulations and laws, including Corporate Governance and Sarbanes Oxley.

FOUNDER & OWNER, INTEGRAL SOFTWARE SYSTEMS, WOODINVILLE, WA

1989 - PRESENT

Expert provider of solutions to small and large clients. Services include:

- System Analysis (Both Business and Technical)
- Definition, refinement and development of system requirements
- Software architecture, design and development
- Software testing, documentation and training
- Database security and networking

Specialties include the evaluation, fixing and enhancing of existing non-operational database solutions.

A wide range of clients have been served, including:

- Shield Technologies LLC – Developed Access and SQL-Server databases to support risk management.
- Sierra Geophysics, Inc – Supported Ingres and ORACLE relational database systems for oil exploration. Taught classes to end users.
- The Boeing Company – Supported an ORACLE conversion task in UNIX.
- Airbag Service Technology – Developed a Foxpro relational database system to support airbag servicing.
- Nintendo – taught a class in structured development.
- Medtronic Physio-Control (aka Emergency Response Systems) – Defined user requirements and designed a relational data structure to support risk analysis.
- Pentar Avionics – Supported a SQL based ordering system.
- Teledyne – Supported and enhanced a SQL based ordering system.
- Seattle Firefighters – Enhanced an existing Access database supporting client billing and payment. Developed a medical claims system.
- Seattle Police Relief Association – Developed an Access database system to support dues billing and payment.
- Teledyne – Supported an Access ordering system.
- Medical Strategic Planning – Developed an Access database system to support data reporting and ad hoc querying for hospital device sales.
- Cline & Associates – Enhanced and supported an Access database which gathers and analyzes union contracts. Creates reports and charts in a variety of formats including Word and Excel.
- CSI Wireless – Defined user requirements and designed a relational data structure.

THE SYSTEM WORKS, REDMOND, WA

6/87 – 10/89

As the principle designer for the Research and Engineering department, responsibilities included design of the application and tools relational databases and the corresponding transactions for an equipment maintenance and inventory system. Other duties included the coordination of software problem reports, training of other designers, application software testing, and development of design and test methods.

THE BOEING COMPANY, KENT, WA

10/83 – 6/87

As a Lead Engineer, developed a Computer Aided Software Engineering (CASE) tool to manage 10,000,000+ lines of code on a government project with Saudi Arabia, and worked in the deployment support group for automated software development tools throughout Boeing. Duties included software development, training, scheduling, and documentation. Applied Artificial Intelligence principles in developing and proving the concept of an automated manufacturing system for a factory of the future.

CUMMINS ENGINE COMPANY, COLUMBUS, IN

1/80 – 10/83

As a Senior Scientific Analyst, the job included coordinating the development of various programs to assist in the design and development of diesel engines, including the Reliability Tracking Database and Analysis System, Transient Emissions, Engine Performance, and Durability databases managing 88 engine test facilities. Participated in a proof of concept

evaluation of structured software design versus accepted industry practice for the development of software, proving that structured software design methods reduced development time and errors.

PAPERS & PRESENTATIONS

Computer Technology for School Administration

Presented at the Northwest Conference of the Association of Christian Schools International, October 1996.

An Integrated Methodology and Toolset for Database Design

Written and published in the Sigmod Record, ACM Press, December 1988.

Using Excelerator on a Large Scale Project

Presented at the Excelerator User Convention, September 1986.

General Purpose Computer Graphics at Cummins Engine Company

Written and delivered for the Society of Women Engineers, 1982 National Convention.

EDUCATION

MASTER OF SCIENCE IN SOFTWARE ENGINEERING

6/87

Seattle University, Seattle, WA

BACHELOR OF SCIENCE IN MATHEMATICS WITH COMPUTER SCIENCE MINOR

12/79

University of Arizona, Tucson, AZ