

Lindsay Ewing

51 Whittemore Rd, Sturbridge, MA 01566 · 774-249-9321 · lindsay.ewing@gmail.com

Solutions Architect & Product Development Director

Uniquely talented solutions architect with 15+ years of multi-scale project development across multiple industries. Exceptional and capable professional with a proven ability for identifying clients' requirements, creating and evaluating solutions, translating them into technical specifications and driving their successful implementation. Experienced project manager, team leader and company director providing support, motivation and guidance.

Key Skills

<i>Development</i>	Visual Studio.NET (VB, C#), C/C++, SQL, Javascript, HTML, XML, Java
<i>Platforms</i>	Windows, Windows Server, Windows Tablet OS, Windows Mobile/CE, RTOS, Unix
<i>Databases</i>	SQL Server, Oracle, MySQL, Merge and Replication, Security and Administration
<i>ERP/MRP</i>	Oracle, Dynamics, BusinessOne, Sage, MAS, In-house and legacy systems
<i>Other</i>	GPS, GPRS, WLAN, UDP/TCP, embedded processors, hardware control, PLCs

Career History

International Coding Technologies, Inc

2008-present

DIRECTOR OF PRODUCT DEVELOPMENT

- Responsible for product development for RFID company specializing in item level tracking, data collection and quality control in rugged environments (concrete & steel manufacturing and construction, railroads, etc). This has revolutionized the concrete and steel manufacturing process worldwide where adopted.
- Spend time on many customer sites investigating requirements and testing RFID solutions. Every situation was a unique and challenging environment that required specialist knowledge and understanding.
- Position involves creating standard and custom software solutions based on industry and specific client's needs, using results from requirements gathering and analysis, and identifying problem solutions.
- Multiple simultaneous project and client management, from small scale to large scale implementations both within the US and internationally. Analyzing customer feedback and data/process flow.
- Lead development team using VisualStudio.NET to build and maintain the different components of the system: handheld mobile devices, central server, desktop applications, networked RFID readers, WiFi UDP/XML communications protocol, based on SQL Server backend with custom integration and reports.
- Provide RFID hardware (readers and tags) consultancy and design input to create physical solutions based on environment and process, including weather, manufacturing process, material and installation.
- Pioneering high level tracking and quality control in Pre-cast and Pre-stress concrete manufacturing including batch tracking and association.
- Integration manager for all projects and all external systems – in-house and off-the-shelf systems (SharePoint, Oracle, Dynamics, etc) all required custom integration based around internal API and libraries.
- Works closely with mobile computer manufacturers (Motorola, ATID, etc) and RFID hardware companies (ThingMagic, Sirit, 3M, etc) to advise and consult on RFID systems for general and specific needs.
- Setup local office focusing on hardware and software research and development with support, release and QC staff. Work with external contractors and outsourcing companies to improve development times and costs.

Projects

- RFID tracking & quality control for automated manufacturing of subway tunnel segments & rings
- Built custom RFID asset tracking and safety inspections solution for steel construction company
- Tablet based QC system allowing photographs to be taken and drawings to be viewed and modified
- Concrete Batch tracking system for identifying and locating individual products and components
- Railroad tie and component tracking and inspection system developed with Union Pacific Railroad & others

Technical Summary: .NET, RFID, GPS, GPRS, UDP/TCP, SQL Server, Oracle, XML, Windows Mobile

Claverhouse Consulting

2007-2008

SOLUTIONS ENGINEER/ARCHITECT/CEO

- Founder of small consulting and development company specializing in barcode and RFID tracking systems for production and manufacturing, specializing in medical and food (FDA) production and defense (DoD).
- Provided support and custom system development for small to medium sized manufacturing plants to schedule production and track time and materials for JIT and lean manufacturing.
- Developed FDA approved tracking system for medical, food and cosmetic product manufacturing facilities. Constantly reviewed and updated based on changing government regulations, generating custom reports.
- Worked with many Defense Department contractors to implement 2D Barcode and RFID tracking for MIL spec shipping tickets.
- Designed custom RFID tracking system for production and custom store and forward database communications using XML over UDP.

Projects

- Consulting and development for FDA manufacturing plant ingredient tracking system
- Plasma cutter manufacturing assembly and barcode system
- Medical supplies distribution warehouse order and shipment tracking
- Independent RFID consulting and development for established barcode company

Technical Summary: .NET, RFID, GPS, UDP/TCP, SQL Server, Windows Mobile, Sage, FDA & DoD mandates

BellHawk Systems, Inc

2004-2007

SENIOR ENGINEER/CONSULTANT

- Senior engineer and project manager for manufacturing and production Barcode tracking software house.
- Responsible for developing and maintaining existing SQL server based tracking software, using Windows mobile computers and central server.
- Developed RFID drivers for new UHF RFID standard hardware and tags. Worked with RFID manufacturers.
- Designed and developed in house 4GL code generator based on data models to create data and process flow simulations and to generate custom application stubs.
- Project Manager with off-shore contractors to rapidly prototype applications and to expand development capabilities of company. Allowed us to win contracts and to develop new tools/applications cost effectively.

Projects

- Designed and built custom medical testing laboratory sample and test tracking system for Athena Diagnostics
- Implemented and upgraded manufacturing plant FDA based quality control and batch tracking
- Defense Contractor component and shipping tracking for Goodrich and other DoD sub-contractors/vendors
- Retail suppliers and distribution warehouse barcode and RFID tracking with advance shipment notices
- Built 4GL workflow simulator that generated scheduling application code stubs in C/C++

Technical Summary: .NET, Barcode, UDP/TCP, SQL Server, Windows Mobile Sage, FDA & DoD mandates

Laser Project Technologies, Inc

2003-2004

SENIOR ENGINEER/SOFTWARE ARCHITECT

- Senior engineer and architect responsible for re-engineering and maintaining existing 3D laser project systems for manufacturing augmentation. Focusing on carbon fiber composite ply lay up in aerospace.
- Migrated existing system to new real-time embedded operating system on x86 processor. Re-wrote low level hardware drivers for galvanometers and laser control. Updated existing communication system to central database with XML. Incorporated MATLAB models and libraries for calculations.
- Worked closely with aerospace manufacturing clients to design installation plan for laser project units.
- Integrated with existing CAD applications and processed imported data ready for 3D projection.

Projects

- Airbus A380 wing struts and engine cowling composite ply layup modeling
- Boeing C17, F15 human assisted manufacturing using CAD projections
- Ford GT40 carbon fiber body panel layup assistance program
- Sea Ray boat hull and cabin reinforcement layout guidance application for fiberglass spraying

Technical Summary: .NET, RTOS, UDP/TCP, SQL, Aerospace, CAD, Embedded processors

Brooks Automation

1997-2003

PRINCIPAL SOFTWARE ENGINEER

- Principal engineer and architect semiconductor, part of the software team responsible for manufacturing process and equipment control applications.
- Developed Low-level automated manufacturing and control equipment calibration and configuration. Coded software drivers and built message protocols for interfacing equipment to production software.
- Built and maintained high-level facility wide manufacturing execution system (MES) for controlling and scheduling work-cell and equipment.
- Pioneered use of RFID and robotics for automated 300mm silicon wafer transport and storage.
- Part of key team in first Fujitsu & AMD joint venture in Japan. Integrating Western process and work flow with Eastern technology and equipment. Coded application in Japanese for shop floor technicians and management. Spent 18 months on-site in Japan.
- Project manager, designer and team leader for new component tracking system for use in medical device manufacturing. Hand-picked team of developers, QC, tech authors and marketing personnel.
- Project lead on in-house 4GL data modeling tool for generating code used to control equipment.
- Developed and installed RFID based wafer tacking and locating system in first 300mm wafer fab in Europe.

Projects

- MES Factory control software for VLSI (Sony Playstation chip manufacturing facility)
- Pacemaker (and other device) component tracking system for Medtronic, AZ
- Equipment control and resource manager for Siemens (Infineon) wafer processing plant
- MES and equipment manager at Fujitsu AMD Flash RAM chip plant in Aizuwakamatsu-shi, Japan

Technical Summary: .NET, RFID, 4GL, UNIX, Hardware drivers, automated handling, lights out production

Concept Systems Ltd.

1995-1997

SOFTWARE ENGINEER

- Software engineer for marine navigation and seismic survey software house.

Projects

- Developed Ocean bottom cable survey system for Exxon using GPS and sonar location
- PC based Satellite tracking system for UK Navy Geological department
- Created Real-time multi sensor bulk iron ore ship monitoring system using customized Windows OS

Technical Summary: Visual Studio, GPS, Marine Navigation, Microwave Comms, Satellite tracking

Education & Certification

- **BSc Honours in Computing** Napier University of Edinburgh 1993 (*certified US Masters equivalent*)
- Microsoft Certified Solutions Developer 2003-2007
- US Defense Department (DoD) aerospace contractor 2003-2004
- UK Ministry of Defence (MoD) aerospace contractor 2004