David Link

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Senior Software Engineer / Programmer / Systems Architect / Data Modeler / Systems Integration / Project Manager / Web Apps / Data Warehousing

Unix / Open Source / Cloud Computing / Python Data Problem Solver

SUMMARY

I am a builder of stable reliable automated systems which run businesses, analyze data, integrate different systems and control process workflows. The systems I build are robust and stand on their own, allowing business users to control and maintain them.

I believe elegance in design leads to high quality systems. Good design decisions continually pay dividends year after year, that lead to substantial cost savings, in time and money. I am very detailed orientated. I analyze complex problems so that they can be expressed easily as a set of simpler ones.

My understanding of technology, together with my use of analysis, design, and planning, together with my team building experience, together with excellent organization and communication skills makes me a very strong IT leader.

LEADERSHIP SKILLS

I manage complex projects, meet deadlines and get things done. My success in managing projects comes from my organizational skills, my documentation skills, and the ability to communicate information both ways between business leaders and the development team. I lead by example by being hands on, creating quality designs, writing quality code, and demonstrating a Can-do work ethic. My philosophy is "Let the best idea win", which means being open new ideas, and listening to all members of the team.

TECHNICAL SKILLS

Object-oriented programming, test driven development, data warehousing, business intelligence, UML, ETL, data modeling, data forensics, UNIX, Python, SQL, Ruby, PHP, Perl, HTML/CSS/JavaScript/jQuery, React, C++, Java, XML, XSLT, EDI, bash, shell scripting, DevOps, cloud computing, Amazon EC2, RDS, Rackspace, excellent schematic documentation, artist, agile software development, MySQL, PostgreSQL, Oracle, MongoDB, Redis, Memcached, ISAM

EXPERIENCE

Tommie Copper, Mt. Kisco, NY   **09/2015 - Present**
Senior Developer
Hired to help the web development team. Saw the opportunity to do much more. Built company's reporting, BI and Analytics systems. Rewrote order fulfillment workflow, to improve automation and error handling. Built integrations with 3rd party vendors. Automated technical and business operations throughout the company. Migrated E-Commerce platform from onsite Magento to BigCommerce SAS. Company tech visionary, leader and mentor. DevOps.

- Built the Central System, which is used for (1) Reporting, BI, and Analytics, (2) Order fulfillment workflow, (3) CRM, (4) Errors and discrepancy reporting, and (5) Middleware to link all internal and external systems.   Built with python,

YAML, MySQL, and a lightweight web front end. It runs on Linux on a cloud server. It leverages code that I open sourced: https://github.com/dlink/vlib, https://github.com/dlink/vweb, https://github.com/dlink/vreports.

- The above was achieved with excellent data modeling, diagraming, documentation using MediaWiki, and automated DevOps.
- Built myriad of integrations with 3rd parties and internal systems, using APIs, EDI, XML, sftp, csv, xlsx, and SQL.
- Understand the company's business objectives to develop and execute projects independently to achieve those objectives.
- Provide Can-Do attitude to all stakeholders to help them achieve their goals.

North American Power, Norwalk, CT   **10/2014 – 09/2015**
Senior Developer
I was hired to help maintain a legacy energy usage and billing system written in PHP Zend, MySQL, and Linux.
- Built prototype replacement system to handle growth. Writing in Python, MySQL, and Linux
- Resolved complex data issues using, Heavy Data Modeling, Analytics, and Forensics

Flat World Knowledge, Irvington, NY/NYC/ Washington, DC   **2010 - 10/2014**
Senior Programmer / Systems Integration
The team and I built the company's back-end content server (Bookserver), which became the backbone of the company's content. It allows editors to publish books, and Professors to customize them. Generates HTML, PDF and eBooks. Integrates with off-site printers to produce physical books. The system allows company stakeholders to monitor the workflow of the system. Built using Python, MySQL, Docbook, XML, XSLT, HTML/CSS, JavaScript/jQuery, CherryPy and Memcached.

Designed and Built Data Warehouse / Central Reporting System:
- Integrates Data from Ruby on Rails, Drupal, Salesforce.com, Silverpop Marketing System, PayPal, and QuickBooks
- Used for all Company Reporting
- Provides on-the-fly Analysis with custom report builder controls.
- Draws Geo Map of Institutions that use our Textbooks.
- Analysis: Data Mining, Data Forensics, Data Cleaning, Data Modeling, and ETLs.
- Developed open-source Simple Python Framework modules: vweb, and vlib available on github/dlink.
- Written in Python, MySQL, HTML/CSS/JavaScript/jQuery/d3, and Pentaho Data Loader

Salesforce Integration:
- Integrates Salesforce with our website.
- Developed Open Source SalesforceApi wrapper, Python, and MySQL

Commerce Server Rewrite:
- Data migration of Commerce Server frin Drupal to Ruby on Rails.
- Built PayPal processing, Printer Order processing, Taxcloud integration, in Ruby on Rails

Move to Cloud Servers:
- Set up Rackspace Dedicated and Cloud Servers and Amazon EC2 Instances with RDS databases.
- Created reusable Server Images loaded with full production tool stacks (Uberservers)

Automated Royalty Reporting
- Accurately report author royalty reporting for Accounting Department
- Multiple Authors with different pay splits, Professors can customize Author books, Separate Revenue Channels, Separate Data Sourcesm Multiple Product Types
- Written using Python, MySQL

MyPublisher.com, Valhalla, NY   **2006 - 2010**
Data Architect / Senior Programmer
Custom Photo Book publishing company.
My team designed and built all book manufacturing, reporting and accounting software. The Plant system includes an automated manufacturing workflow engine, resource management, and batch job processing, a well-designed Data Model and Object Model, and an online Web 2.0 Bookviewer Application.   All of which MyPublisher relies to compete in the marketplace.

The Plant system is built with Python, MySQL, and HTML, running on Linux. It manages over 30 Terabytes of customer and manufacturing data. The Bookshelf System is built in PHP, Flash and HTML.

Nielsen Entertainment at VNU, Inc., White Plains, NY   **2001 - 2006**
Software Architect / DBA
I was hired to transition the existing development staff from ISAM based technology to SQL Database technology. This was done for new development using Perl, PHP, Apache 2.0, PostgreSQL and MySQL Databases on Linux.

Built Nielsen Videoscan, a subscription-based Web Application for reporting and analysis of Movie Video retail data for multi-million-dollar clients base in Hollywood. Similar to our showcase product Soundscan for Music.

Responsible for full development life cycle from conception to market. Built with Perl CGI, Mod Perl, Apache, PostgreSQL, and Linux, Mandrake, RedHat and SUSE. The Data Model is in third normal form but is also denormalized where necessary for performance. 125 Gigabytes of data. Object Data Layer. Custom web-based data warehouse query facility that does not require a browser plug-in. UML diagrams used for communicating new design specification s to developers.

Built operations tool to help analysts support the main SoundScan system using a central database of common attributes. Built with PHP, Apache, MySQL on Linux.

Oracle Corporation, Valhalla, NY   **1995 - 2001**

Software Development Manager, Dec. 1999 - Jun 2001:
Development manager of the Oracle Internet Procurement Enterprise Connector (OIPC) which integrates Oracle Applications with SAP and other ERP systems. My team consisted of four senior engineers. Software relies on middleware for B2B or A2A at large client sites. Built with PL/SQL, Oracle RDBMS 8i using OAG compliant XML for transactions, Java, Perl, running on Solaris and Linux.

Senior Principal Engineer, Feb 1998 - Nov 1999:
Developed pilot project for Oracle Process Manufacturing application (OPM) using Oracle Business Components for Java (BC4J) using JDeveloper and Oracle RDBMS 8i on Solaris.

In charge of Global C Coding Standard Compliance project (OCCS) for all of OPM. Converted 1,000,000 lines of C code successfully. Project included research, programming, automation and cross functional team coordination with the help of 10 engineers. Used ANSI C, Oracle RDBMS, PL/SQL, OCI, Oracle Pro*C, Oracle Forms, and Perl on Solaris and Linux.

Senior Applications Engineer, Jan 1997 - Jan 1998:
Developed Capacity Requirement Planning (CRP) and Material Requirement Planning (MRP) modules of the Oracle Process Manufacturing Application (OPM). Built with C, Oracle Pro*C for the SQL, JACC JAM, and Oracle RDBMS, Unix shell scripting in (ksh).

Unix System Administrator, Oct 1995 - Jan 1997:
Administration of 32 midrange Unix and VMS computers. This included managing users, disks, applications, networks and system configurations. Automation was paramount. I used C, Unix Shell scripting (ksh), sed, awk and rsh to automate host and user maintenance across all flavors of Unix that we supported at that time. Those included: HP-UX, AIX, SunOS, Solaris, Digital (OSF1)(TRU64), Data General, Sequent, and SCO XENIX.

Nitrogen Fixation Research Center, University of Mexico, Cuernavaca, Mexico   1990 - 1995
Molecular Biology Programmer & Systems Administrator
- Managed all information systems including purchasing, configuration, maintenance, and user support of all computer equipment at the Center.
- VAX VMS and Sun Solaris Unix System Administrator.
- Set up first networks. Introduced the Center to the Internet.
- Supported Research with GENBank and EMBL using C, Perl and Prolog on Solaris, and Shell Scripting in VMS.
- Built Research Grant Accounting system written in MS Professional Basic, and C using MS PROISAM on DOS.
- Set up Bioinformatic databases using 4th Dimension, Filemaker Pro and HyperCard on Macintosh.
- Set up a webserver using NCSA httpd. Developed the Center's first website using standard HTML.

Fish Software, Cuernavaca, Mexico   1992 - 1994
Designed and developed six small business accounting applications -- Menu driven systems with pop-up windows written for MS-DOS in MS Professional Basic, PROISAM and MS Quick C.

G & Z Systems, Inc., Hawthorne, NY   1981 - 1989

Designed and developed business applications on microcomputers for in turn-key solutions. Worked on accounting applications, including: A/R, A/P, G/L and P/R, using THEOS O/S, UX Basic and C.

EDUCATION

SUNY Empire State Hartsdale, NY, Mathematics	1998 - 1999
SUNY Purchase, NY, Fine Art	1981 - 1982
SUNY Oneonta, NY, Mathematics	1979 - 1981

SPECIAL INTERESTS

Art, Philosophy, Mathematics, History, The Outdoors, Go, Fluent in Spanish.