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Summary

I am a senior software engineer/team-lead/software architect and software evangelist with a research-scientist attitude toward everyday tasks, and compile and distribute technical findings and solutions as they are relevant to the team and larger software community. I am a practicing student of software craftsmanship, Kathy Sierra, Edward Tufte, and human-computer-interaction. I am excited about my work and the absolutely amazing advances happening everyday in the developer's behind-the-scenes world within computing, giving users the ability to be awesome is a primary directive in my work. I am interested in how the technologies of IoT, Mobile, and VR will shape the use of Ruby/Rails, .NET, NoSQL, and cloud DevOps. My interest and expertise are also held in the areas of enterprise architecture/SOA, business analysis, "backend" complex requirement solutions, mentorship and development of under-represented members of the software industry, and helping kids learn to program.

- 20 years designing, architecting, implement, deploy, maintain all aspects of client/server applications for customer and business use.
- 10 years implementing full life-cycle for multiple Ruby on Rails applications.
- Experience in design, development, and implementation of applications using CouchDB, MongoDB, PostgreSql, Mysql, .NET, SQL Server, Oracle.
- 5 years architecting, implementing high-volume Ruby/Rails/Python SOA web services infrastructure.
- Experience with Database Design and Database Programming (Stored procedures, Triggers) using SqlServer, MySql, PostgreSql, Oracle, CouchDb
- Expert business analyst; architect and designer for cross-departmental systems and integration between strategic and operational technology.
- Mentor development teams in Agile short-iteration deve lopment.

Example Works

Throtl.com : www.throtl.com - A performance-auto enthusiasts marketplace. My work is visible in the Search page, which uses elasticsearch indexing of my implementation, and is based upon listing scanning that I implemented.

Chicago Tribune user-login/security system : www.chicagotribune.com - click through about 5 articles and

past the light-blue "This is your last article" warning -- the "You've reached your montly article limit" modal and it's various routes are backed by the RoR system that myself and my team built from the ground up. It gets many 1000's hits per day.

I wrote the skeleton of the v. 4 of "Shoes", https://github.com/shoes/shoes4 - The original Shoes was written by _why (Why the lucky stiff), who in 2009 conducted a full pull-out of digital media, including shutting down his full github account, including tools like Camping, Hpricot (xml/html parser), and Shoes.   Several enthusiasts picked up Shoes in various incantations. Myself and Steve Klabnik https://github.com/steveklabnik collaborated on a re-write motivated by the breakdown of Shoes' video driver and audio-playback driver (bloopsaphone - the chiptune maker for portaudio).   I wrote a skeletal beginning of Shoes over Java-SWT, using Jruby, with an adapter-pattern backend that made the developer-api "shoes" available to SWT, QT, and wxWidgets backends, to name a few.
Shoes4 development has gone on and is in active development to this day.

https://www.myroundpro.com/ - by TaylorMade golf - a collaboration between TaylorMade and Microsoft Band - fitness-watch. myRoundPro's backend is ruby on rails and drives the API interface used by the Band's "golf" widget, including upload of stroke-detection and GPS information after a player has completed their round. I was sr. engineer on back-end and API interface design and implementation, with close work with Microsoft principal engineers over the Band software project.

Skills

Languages: Javascript, Ruby, Python, HTML5, CSS3, C#

Frameworks: Rails, ASP.NET

Databases: PostgreSql, CouchDB, SqlServer

Operating Systems: Mac OSX, Ubuntu Linux, Windows

Web UI Frameworks : React.js, AngularJS

PaaS/IaaS : Amazon Web Services, Heroku

Languages experienced: Elm, Haskell, Clojure, F#

Databases experienced: MongoDB, MySql, Oracle

Web Servers experienced: Nginx, Apache

Application Servers experienced: Unicorn, Puma, Passenger

Professional Experience

Sr. Software Engineer

02/2016 - Present - Throtl.com - San Diego, CA - Part Time
Modified Car Enthusiasts Marketplace

With over 50,000 members, users go to Throtl.com every day to buy and sell custom parts for their performance automotive projects

Responsibilities

- Design and implement back-end scanner that reads over 1000 web sites for new buy/sell listings every 10 minutes.
- Implement elasticsearch indexing of listings for improved search performance and search terms handling.
- Implement optimization updates to code and infrastructure to allow website and scanner to perform at-scale.

Team Lead / Sr. Software Engineer

04/2016 - 02/2017 - Airspace Technologies - San Diego, CA
Logistics Specialist in Next-flight-out shipments

Responsibilities
- Team lead to 8 developer team, including remote-located members. Provided onboarding to 7 Sr. Developers.
- Implemented automated routing system, including search across airline scheduling database for candidate flights per shipment, including ETL for ingest of 10MM flight records into searchable indexed tables.
- Implemented integration of distributed sensor to provide real-time location updates of package location - AirTrace
- Architected, Designed, and Implemented changes to multiple-application system for at-scale operations from prototype implementation
- Devops : Migrated 3 production applications + db from AWS Opsworks/ElasticBeanstalk/RDS into Heroku stack + Postgresql
- Implemented continuous integration + static code analysis to assist management of deployment pipeline.
- Implemented continouous-deployment strategy to development and testing services on Heroku stack
- Defined hardware requirements for next-generation location sensor - AirTrace
- Provided Project-Management duties for team, including regular meeting with Business Liason for agile task prioritization

Sr. Software Engineer

12/2015 - 04/2016 - Intuit - Live Community / Self Help - San Diego, CA
Consultant for Xtreme Consulting, Inc.
Intuit - Serving online and desktop financial applications worldwide. TurboTax, Quicken, QuickBooks, enterprise services.

Responsibilities
- Analyzed and Developed solutions for Live Community web UI.

Sr. Software Engineer

10/2015 - 12/2015 - BlueRocket, Inc - San Francisco, CA
BlueRocket, Inc. is a web solutions consultancy, providing web, IOS, and Android application development and design services.

Responsibilities
- Analyzed and Developed solutions for web UI, data import and API client projects.

- Assisted in monitoring and maintenance of Heroku based server deployments and configurations.

Sr. Software Engineer

05/2015 - 10/2015 - TaylorMade Golf - San Diego, CA
Consultant for Marquee Staffing
TaylorMade Golf is a major golf equipment manufacturer

www.myroundpro.com - MyRoundPro is a web service to monitor golfer's performance on the course and provide statistical analysis of their game.   MyRoundPro is integrated with the Microsoft Band fitness monitor for automated game data collection.

Responsibilities
- Analyzed and Developed solutions for MyRoundPro.com website and API
- Maintained and enhanced internal web-based golf course metadata editor and data importer
- Assisted in monitoring and maintenance of AmazonWebService based server deployments and configurations.

Sr. Software Engineer

04/2015 - 05/2015 - DJO Global- San Diego, CA
Consultant for TekSystems
DJO Global is a medical durable goods manufacturer

Responsibilities
- Evaluated and recommended online issue-tracking/Scrum-tracking tool for team use.
- Presented Scrum information sessions to development team and Sr. management and BusinessOwner. Acted as interim Scrum-Master for two initial sprints.
- Developed modifications to Ruby on Rails application per Scrum sprint assignments

Sr. Software Engineer

12/2013 - 04/2015 – Intellisis Corp - San Diego, CA
Intellisis Corp produces data analysis applications for audio systems.

Responsibilities

- Implemented features, refactoring, and fixes to Python + QT desktop administration application, including QT messaging using Signal/Slot mechanism for long-running processes.
- Recommended, designed, implemented REST API application with Python / WSGI, using CouchDB database and RabbitMQ/AMQP messaging for long-running processes.
- Mentor internship students on construction of AngularJS application using Twitter Bootstrap templates, including automated testing with Karma/Sinon/Chai.
- Implemented AngularJS + Twitter Bootstrap application for administration of data-analysis application.
- Updated Python Fabric server-deployment tool for maintenance of Redhat 6.5 target servers.
- Refactored Python custom-build tool from Bash to Python to facilitate update and

maintenance of custom Python builds.

Sr. Software Engineer / Architect

10/2011 - 11/2013 – Tribune Digital - Chicago, IL
Tribune Digital provides web solutions for internal and public facing web sites for all
newspapers and web projects held under Tribune Corporation.

Responsibilities

- Sponsor Test-Driven Development and mentor other staff developers on TDD
  techniques and practices. Configure code-coverage reporting for
  continuous-integration test servers.
- Design, Implement, Assist Architecture for Digital Subscription Service registration
  system for newspaper sites. This Javascript/Ruby-Rails system enforces registration
  and subscription to 4 Million+ users. Lead team of 6 developers on continued feature
  and enhancement implementations.
- Architect, Design, Implement Proof-of-Concept Rendering application for all Tribune
  newspaper websites. Deployment of this application is in cloud-based
  multi-datacenter, multi-server environment. Using REST client to other Tribune SOA
  services for content data.
- Research and document evaluation of MongoDB, PostgreSql as options for
  multi-datacenter master-master redundant data stores for application configuration
  and newspaper-content databases.
- Build .NET development team in main office (Chicago).
- Lead conversion of .NET/Windows Azure Proof-of-concept Data Aggregation service
  into Production development/maintenance operations.

Sr. Software Engineer / Architect, Web Services/VOIP

04/2009 - 10/2011 - Vail Systems, Inc. - Deerfield, IL
Vail Systems is a hosted communications provider of industry-leading VOIP products. Ruby
on Rails is the software of choice for administration-panel applications to all of their VOIP
products.

Responsibilities

- Architect, Design, Implement, Maintain production administrative web services with
  Ruby/Rails using MySql,SqlServer rdbms.
- Mentor team in use of Test-first development, continuous-integration,
  pair-programming.
- Implement migration of VCS from Subversion to GIT
- Mentor new developers on learning of Ruby/Rails and developer environment tools
  (GIt, VIM, T-SQL)

Sr. Software Engineer / Rails development Mentor / Agile process Mentor

07/2008 – 01/2009 – American Transport Group, LLC
American Transport Group, a 3rd party logistics specialist, is hosting an application
re-architecture project for their in-house business management / operations application.

The target framework is Ruby on Rails, developed using agile short-iteration process.

Responsibilities

- Provide detailed analysis of Microsoft Silverlight, ASP.NET, Ruby on Rails, Perl/Catalyst capabilities and features
- Mentor 2 developers in self-study of Ruby language and Rails framework
- Mentor 2 developers in agile short-iteration process and procedures and theory
- Implement Rspec based Behaviour-Driven Development and mentor developers in its use

Sr. Software Engineer, Web Services/VOIP

09/2007 - 06/2008 - Parus Interactive, Inc. - Bannockburn, IL
Parus Interactive is a leading Unified Communications software and hosted communications provider. Using custom VOIP and web services, advanced unified-communications systems are provided to Parus Interactive software clients and hosted-communications clients.

Responsibilities

- Implement test-driven development support utilities and software framework in PERL for testing Catalyst webserver
- Implement software solutions for REST web services requirements in PERL for Catalyst webserver
- Email-sending module, incorporating requirements of IETF RFC 822 "Standard for ARPA Internet Text Messages"

Software Engineer, Business Intelligence

02/2007 - 08/2007 - Independent Contractor - Chicago Business Intelligence Group - Chicago, IL

Chicago Business Intelligence Group (CBIG) is contracted to a large Reassurance corporation to build and maintain a business-intelligence driven data warehouse and analysis application using Microsoft SQL Server 2005 Database and Services and Visual Studio .NET 2005.

Responsibilities

- Implement test-driven design of Excel Upload to data warehouse staging tables and implement staging-to-cube loading process for uploaded data
- Perform modification of daily data warehouse loading process according to new process requirements and business rules. Modifications include refactoring all steps of load process to allow automated repeatable loading of the data warehouse cube data
- Document technology changes for various levels of understanding including business logic design, data warehouse implementation, system configuration, end-user documentation

Applications Manager, Enterprise Software Architect

10/2003 - 11/2006 - Lakewood Homes, Inc., Hoffman Estates, IL

11/2001 - 10/2003 - Alliance Technology Group, LLC, Schaumburg, IL (Consultant for Lakewood Homes, Inc.)

Lakewood Homes, Inc. is a residential homebuilder in the Chicagoland area. In 2001 Lakewood contracted my work through Alliance Technology Group to begin building a purchasing bid-management program subsequently named Purchase Manager. Purchase Manager is built on VB 6.0 and Sql Server 2000. Purchase Manager displays and manages data for Sales, Purchasing, Accounting, and Production departments. Architecture of Purchase Manager SQL DTS packages perform nightly data-update tasks for scheduled data transactions, and synchronization of data between Purchase Manager, Sales CRM, and Accounting databases. In 2003 I transferred to Lakewood as a full-time employee. Further applications developed in Visual Studio.NET 2003/2005 are Sales Mapper and Release Sheet for Sales Price change releases.

Responsibilities

- Led application creation, design, implementation, deployment, continued maintenance and modification of corporate-wide business applications for Sales, Purchasing, Accounting, and Field Construction departments at Lakewood Homes, Inc.
- Desktop application solutions for Windows clients using Visual Basic, C# 2005, MS Access and SQL Server
- Web-based customer service portal using Ruby on Rails, SQL Server.
- Corporate-wide data storage using SQL Server, including multi-database synchronization using T-SQL procedures, SQL Server DTS, Ruby on Rails

Software Engineer

03/2000 - 10/2001- World Travel Partners, Inc., Northbrook, IL

- Developed web-based Airline business analysis application using J2EE/JBoss architecture
- Led organization of team development using CVS and branched check-in/merge
- Implemented, deployed, and maintained desktop application for International Rate Services tracking using Visual Basic, SQL Server

Software Developer

05/1999 - 03/2000 - Micro-Tek, Inc., Bakersfield, CA

- Implemented and deployed Oilfield Maintenance Scheduling application using Visual Basic, Oracle, PL/SQL

Software Developer

11/1997 - 05/1999 - Profit Solutions, Inc., Minneapolis, MN, Norstan Consulting, Inc., Bakersfield, CA

- Developed CRM/Sales application for sale/distribution to client corporations.
- Worked in team environment to build Visual Basic, Access 2000, SQL Server desktop/distributed application
- Designed SQL Server database implementation and multi-database synchronization

using T-SQL procedures and Visual Basic
- Deployed application instances to client customers at field locations
- Provided customer service and help desk assistance to client customers

Software Developer

06/1995-11/1997 - Texas Instruments, Inc., Dallas, TX

- Developed user interface and machinery automation for fabrication machinery in computer-chip fabrication plants
- Worked in team environment to define API requirements, factory operations requirements, and end-user needs for each automation system
- Ported unix-based C++ automation framework to Linux (Slackware)
- Deployed completed applications to factory workstations, including installation of all required networking, hardware, and factory machinery interface connections
- Provided end-user support for start-up and initial training of each installation

Education

Texas State University - San Marcos, San Marcos, TX

Bachelor of Science, Computer Science, 1995

Certifications

Microsoft Certified Developer

SQL Server Developer 2000

Memberships

Association for Computer Machinery (ACM)
Mentornet - Mentor to students of computer science