

WORK EXPERIENCE

Software Engineer, Independent Consultant (2010 – Present)

Technologies: Ruby on Rails, CSS, HTML, JavaScript, SQL

Senior Software Engineer (Contract), Bloomberg (2012)

Technologies: Ruby on Rails, CSS, ElasticSearch, HAML, HTML, JavaScript, RSpec, Sass, SQL

- ElasticSearch wrapper API for indexing, searching, sorting, faceting, and suggesting
- Performance optimizations: increased performance by 75%-300% across various pages
- User activity auditing system: logging, tracking emails, monitoring user engagement, etc
- Dashboard for segmenting and visualizing user profiles
- Admin interface for managing all user events and locations
- Bloomberg Institute homepage

Senior Software Engineer, Etsy (2010)

Technologies: data mining, AWS EC2, AWS EMR, CSS, Hadoop, HTML, JavaScript, JRuby, PHP, Scala

- Cascading.JRuby utilities to construct Hadoop jobs via Ruby DSL
- User funnel reconstruction via web log analysis
- EC2 cost auditing dashboard, with data visualization and Google Docs integration
- Image mosaic web app, with Facebook integration
- AB-testing web app to compare and evaluate product recommendation algorithms

Staff Software Development Engineer, Pervasive Software (2007 – 2010)

Technologies: parallel programming, data mining, Java, JavaScript, SQL

- DataRush: dataflow-based high-performance parallel programming framework
- DataMatcher: fuzzy matching (e.g. Levenshtein, Jaro-Winkler) with scalable performance (15 million rows/sec on 8-cores); featured in Java Developers Journal
- Data cleansing utility, more than doubled match accuracy of DataMatcher
- Multi-way join utility with multi-core scalable performance (<1 min for 600 million record 5-way join on 8-cores); replaced a join procedure that ran for hours
- Twitter tweet filter with fuzzy term matching (17,000 tweets/sec on 4-cores)
- RushRecommender: recommender system using collaborative filtering co-clustering; 8.5% better RMSE than Netflix's Cinematch, with multi-core scalable performance
- K-Nearest Neighbors classifier with multi-core scalable performance
- JavaScript-based DSL for DataRush, enabling creation of high-performance massively-parallel applications without need for compilation

Software Developer, e-MDs (2006 – 2007)

Technologies: .NET, C#, CSS, HTML, JavaScript, SQL, WCF

- MacroProcessor: text macro engine with template DSL and wizard-like expansion
- Database sync system to deliver schema changes and content to distributed install base
- Application update system with dependency checking and license verification
- RazorChart: next-gen full-patient-charting electronic medical records web app

EDUCATION

Louisiana State University (2001 – 2005)

- BS in Computer Science, 3.9 GPA
- BS in Mathematics, 3.8 GPA