



## Bryce Ott

Provo, UT, United States • Member since April 17, 2014

With more than 13 years working as an engineer, architect, director, vice president, and chief technology officer, Bryce brings a deep understanding of enterprise software, management, and technical strategy to any project. His specialties include real-time systems, business intelligence, big data, enterprise web apps, scalability, and open-source software.

SQL

JavaScript

PHP

HTML5

CSS

Java

Visual Basic

Windows

MySQL

Security

Zend Studio

FedEx API

AJAX

DHL API

Zend Framework 2

PORTFOLIO

**Sentius Technologies**

Node.js, JavaScript, HTML5, Big Data, Business Intelligence...

**Technology and Venture Commercialization Office, University of Utah**

Business Model Canvas, Lean Startup, SOA, mobile apps, web applications...

**Juxta Services**

Node.js, JavaScript, PHP, Flex, Java, CSS, HTML5, MySQL, AWS, MongoDB, Linux...

EXPERIENCE

**PHP**, 13 years

**HTML5**, 13 years

**CSS**, 13 years

**JavaScript**, 13 years

**Twitter Bootstrap**, 4 years

**AngularJS**, 2 years

**Node.js**, 4 years

**MySQL**, 13 years

AVAILABILITY

Part-time

PREFERRED ENVIRONMENT

Mac, Linux, Eclipse IDE, Git, Subversion

THE MOST AMAZING...

“...thing I've built leveraged enterprise technology to automate business functions in real-time, and done so for a fraction of the cost.”

## **Co-Founder, CTO**

2014 - PRESENT

### **Sentius Technologies**

- Designed and built enterprise-level business intelligence software for small and private healthcare practices, providing a competitive edge through big data-driven business and operational insights.
- Performed generation of localized benchmarking, healthcare analytics, and key insights through analysis of core KPIs.
- Created scalable automated data extraction, analysis, report generation, and distribution at an enterprise scale.
- Delivered SaaS-based customer portal for real-time data analysis and benchmark comparison.

Technologies: Node.js, JavaScript, HTML5, Big Data, Business Intelligence, Column Data Warehousing, Data Visualization, Store Databases, SOA, RESTful APIs, SaaS, Cloud Computing

## **Resident Venture Developer**

2013 - PRESENT

### **Technology and Venture Commercialization Office, University of Utah**

- Worked as external partner, providing business model and market validation, technology consulting, project management, scoping, and development expertise for promising technology projects coming through the University Tech Commercialization Office.
- Worked on management of marketing, project selection, and implementation for Software Development Center (SDC).
- Implemented a Lean startup model, a business model canvas, web applications, mobile apps, big data, analytics, and educational software.

Technologies: Business Model Canvas, Lean Startup, SOA, mobile apps, web applications, Node.js, PHP, Java, .Net, C++

## **Strategic Technology Consultant**

2008 - PRESENT

### **Juxta Services**

- Architected, managed, and implemented scalable, global, enterprise-level software solutions for clients such as Estée Lauder, Disney Research, Apple, DHL, FedEx, and UPS.
- Worked on Business and Technology strategy, Software Development, Systems architecture, Database administration and Information Technology consulting services, as interim CTO.
- Used Server virtualization and Cloud computing technologies including Amazon Web Services (AWS), KVM, Xen, VMWare, Eucalyptus, and Ubuntu Enterprise Cloud.
- Managed development resources, project expectations, requirements, scope, and timelines.
- Developed and validated Industry, market, customer and business model.

Technologies: Node.js, JavaScript, PHP, Flex, Java, CSS, HTML5, MySQL, AWS, MongoDB, Linux, Apache, Xen, KVM, Networking, Load balancing, Big Data, BI, Data Warehousing

**VP of Development/CTO**

2012 - 2014

**Linkdip**

- Architected and developed human-curated marketplace for social media ranking signals exchange.
- Involved in the active development and held architectural role in scaling complex web application.
- Performed Intimate integration with multiple social media platforms (Facebook, Twitter, Google+, Tumblr, etc.).
- Managed both in-house and outsourced development resources.
- Generated scalable online marketing and lead-generation technologies.

Technologies: PHP, Linux, Apache, MySQL, jQuery, Kohana, Node.js, MongoDB, CasperJS

**Director of Engineering**

2010 - 2012

**Rock Solid Internet Systems**

- Held an active development role, creating complex web-based software utilizing LAMP, AJAX, and Flex technologies.
- Developed and managed IT resources, including ensuring PCI compliance and the architecture of a distributed, multi-site, co-located infrastructure.
- Performed integration with both global and localized shipping carriers, including rate retrieval, shipment creation, tracking, pickup, and label generation.
- Managed internal and outsourced development resources utilizing Agile, Scrum, and Kanban.

Technologies: PHP, MySQL, Linux, Apache, Flex, KVM, AWS

**Sr. Lead Developer****ZenPrint**

- Responsible for the architecture and creation of software to facilitate print fulfillment, by integrating eCommerce web applications with third-party technologies to automate and streamline print and fulfillment of digital, offset, apparel, and promotional items.
- Designed and developed dynamic web-to-print platform, using OO PHP, MySQL, JavaScript, AJAX, CSS, and XML, to create customizable eCommerce front-end and highly configurable products.
- Responsible for the architecture and configuration of core components of the application stack, including database structure, hardware, OS, web server software, caching resources, networked file storage, Xen virtualizations, etc.
- Designed architecture and developed API resources for access to orders, customers, shipping, products, etc. via SOAP and AMF.
- Integrated eCommerce platform with various 3rd party APIs including shipping, financial processing, tax data, inventory, and print fulfillment.
- Implemented front-end design and functionality including CSS, JavaScript, DHTML, and AJAX.
- Responsible for security-related initiatives, including PCI compliance, server hardening, secure development practices, and penetration testing.
- Communicated with internal and external customers and management, to define project scope, requirements, definition, and timelines.

Technologies: Magento, PHP, MySQL, Linux, Apache, JavaScript, XMPiie, Xerox, InDesign

**Sr. Software Engineer**

2006 - 2007

**Doba**

- Performed web-based, object-oriented application development in OO PHP, DHTML, JavaScript, Ajax, and MySQL.
- Executed integration with 3rd-party web service APIs, including payment, ACH, suppliers, etc.
- Designed and developed API interface for customizable access to company data for internal and external customers.
- Performed Linux server configuration and administration including Apache, MySQL, PHP, Samba, Cron, Xen and VMWare virtualizations, etc.
- Developed software for management of company wide code deployment to testing and production environments.
- Spearheaded security and penetration testing initiatives.

Technologies: PHP, Linux, Apache, MySQL, JavaScript

**Software Engineer / IT Admin**

2005 - 2006

## Digital Harbor

- Performed enterprise-level Java J2EE client/server application development, using XML, Swing, Weblogic, and various database technologies.
- Implemented transactions in enterprise-level application.
- Used JKS certificates in Java applications.
- Wrote SILK and JUnit tests to validate code.
- Managed Windows and Linux network infrastructures and other IT-related tasks including DNS, firewall, CVS, etc.

Technologies: Java, XML, HTML, Swing, WebLogic, MS SQL, Oracle, MySQL

**IT Manager / Lead Developer**

2003 - 2005

## DIPPR801 Thermodynamic Laboratory

- Performed relational database design and administration.
- Developed software (Visual Basic) to use with a relational database.
- Performed project management of software application development.
- Responsible for web site security, design, and maintenance.
- Responsible for network, web, and server security.
- Performed web server/site and file server/domain controller setup and maintenance.

Technologies: ASP, Visual Basic, MySQL, MS SQL, Access, HTML

---

### **Estée Lauder - The Beauty of Night (Development)**

This global marketing application was built for the product launch of a new Estée Lauder night-time beauty serum, and offered a responsive design to accommodate optimized user experiences in mobile, tablet, and desktop browsers.

Built using an SOA model on the LAMP stack utilizing SlimPHP, AngularJS, Unity, and jQuery, the premise of the application was to allow global users to submit a comment or image and then be randomly connected with another user on the other side of the world.

Those connections were then beautifully displayed on a night-time globe for browsers supporting Unity, or a customized night-time implementation of Google Maps, allowing the user to zoom in and out and view content submitted by other users, with logic to filter and consolidate connections depending on the zoom level.

The application also required an administrative console for live content curation, and full locale and language support for 40+ languages to cover all markets where the product was being released. Users would see content submitted by other users translated into their own language (accomplished via Google Translate).

Upon deployment, this application was used by thousands of customers in hundreds of countries across the globe.

### **University of Utah - UTTS Exam Software (Development)**

Developed for the Chemistry Department at the University of Utah, the UTTS software is a visually minimal, highly efficient SaaS-based software solution which allows the administration of online exams to university students in a controlled context.

Designed to scale to thousands of users, the system allows for the administration and proctoring of timed exams either remotely, or from within a secured testing center environment. Features include multiple question types, missed question retries for partial credit, full control over user access and course registration, and consolidated data analysis of exam results.

Not only does the software allow for the typical analysis of exam averages, number of students who missed a specific question, etc., but it employs a novel concept called Item Response Theory (IRT) to actually analyze the results to quantify both the aptitude of the test taker, and the quality and difficulty of each question. This allows the system to rate questions in the question bank so that they can be selected for inclusion in later tests based on their difficulty, as well as offering the instructor and other administrators details on which concepts lack adequate understanding among students.

Currently this software is being used by thousands of students at 3 Universities and a handful of high schools, It has been built using the LAMP stack with SlimPHP, Twitter Bootstrap, and jQuery.

**Praedo Institute - Learning Management System (Development)**

<https://praedo.com/>

As the leader in online training for the real estate and mortgage industries, Praedo provides online, regulator-approved training to thousands of real estate and mortgage professionals in the US. Steady growth over the last decade left Praedo with the need for a newer, more efficient online system for delivering content to their users.

This project therefore involved rebuilding their course delivery and management system from the ground up on newer technologies, while ensuring that existing content could be imported into the new architecture.

Components of this new LMS system included ecommerce for registration and payment processing, media integration for video, audio, and slide-based content, conversion of existing courses from PowerPoint to web-deliverable SVGs, and custom PDF manipulation.

In addition, in order to meet regulatory requirements, the software was required to administer mandatory quizzes and exams to users throughout the course, and mandate a certain level of performance in order to receive a final certification. The technology stack for this project includes LAMP, jQuery, Bootstrap, and CakePHP, and is currently being used by thousands of Praedo customers.

**Dizzle - Social Ranking Signal Marketplace (Development)**

<http://www.dizzle.com>

With a goal to increase social media reach and engagement across its users, Dizzle came up with the concept for a marketplace where users could exchange points for tweeting, liking, +1ing, and otherwise sharing content from other users.

Tightly integrated with various social networks including Facebook, Twitter, Google+, Tumblr, etc., Dizzle users could share and promote content to their social network accounts with a single click. Built originally on the LAMP stack using the Kohana framework and jQuery, as the dataset and user base grew, it was necessary to migrate some of the functionality to more scalable technologies such as Node.js, MongoDB, Twitter FlockDB (social graph), while maintaining a functioning site.

At it's peak, dizzle.com had thousands of users conducting tens of thousands of actions on the site each day.



## **Sentius Technologies - Business Intelligence Platform (Development)**

<http://www.sentiusdata.com>

Sentius Technologies is a business intelligence company that provides a competitive edge to small and private healthcare practices by automatically integrating with existing data sources to produce business insights that lead to better decisions and patient care.

The technology built for this project involved integrations with 3rd party data sources including claims processors, practice management software, and client accounting software. Once data is extracted, it is then consolidated in a data warehouse where a combination of automated and human curated analysis extracts meaningful business insights that are packaged up and delivered to end customers via a monthly report. Customers also have access to a real-time dashboard where KPIs can be monitored and tracked over time. Localized industry benchmarks across the entire dataset are also visible to customers.

The system has been built using a Service Oriented Architecture (SOA) utilizing an enterprise technology stack that is designed to scale as needed. It consists of several web services accessible via RESTful APIs to input data via a central log service, interact with the datawarehouse, and provide visualizations in a SaaS-based web application.

## **Linkdip - Lead Generation Platform (Development)**

Linkdip is a digital company specializing in online marketing and lead generation. Aside from their tried and true processes in coming from AdWords campaigns and channel partnerships, they wanted to develop some new channels using online classified ads.

This project therefore, involved the development of a scalable, enterprise-level implementation to take client content and automate the creation of customized classified ads on the world's largest classifieds site. Content could either be entered manually via an admin interface, or pulled automatically from various content feeds.

The technology stack was quite extensive and included Node.js, CasperJS, Linux, Apache, MySQL, PHP, Twitter Bootstrap, jQuery, and integration with 3rd part call center software, as well as some extensive data center customizations to accommodate the requirements that content be posted from IP addresses local to the target region. In addition, Big Data analytics were applied to help tune content for optimized response rates.

This software has been utilized to automatically and efficiently post thousands of ads and generate leads in the real estate, jobs, and professional services industries.

## **ZenPrint - Web-to-Print Platform (Development)**

ZenPrint is a technology company providing white-label and API-driven web-to-print services. This project involved building a platform for client companies to setup a branded eCommerce website (ZenFront) where they could sell customizable products, ranging from printed paper products (business cards, signs, banners, etc.), to apparel (screen printed and embroidered), mugs, keychains, books, etc.

After generating their customizable designs in InDesign format, the platform would allow for the import of the design and the selection of customizable fields on the product, after which it would be added to the client's storefront for purchase. From there, as the end user entered customized fields, they would be rendered in real-time, accounting for text length, font-size, etc, in order to show the user exactly what the printed product would look like.

In addition to automating logic on the front end for customizable products, the project also involved building back-end workflows and processes for efficiently batching and fulfilling orders. Integrated with dozens of printers and external fulfillment sources, the platform would even allow for clients to continue warehousing and fulfilling their own products that were part of an existing workflow.

The technology stack included Linux, Apache, MySQL, and PHP using the Zend Framework and Magento platforms, some proprietary 3rd party software from Xerox for accurate rendering of customizations, and 3rd party process flow and warehousing software.

Several of the ZenPrint's client portals have seen access by tens of thousands of end customers, resulting in tens of millions of dollars in revenue.

## **Apple, Inc. - Project Management Dashboard (Development)**

Working closely with Apple and their project management software vendor, AtTask, this project involved the integration of the AtTask system with existing internal software at Apple for tracking project goals, employee and customer interactions, and current status. In addition to the standard, AtTask functionality, this project also involved the creation of a custom dashboard so management could view and track project status in real-time.

The technology stack for this project included Java J2EE, with EJBs for the AtTask integrations, and Apache Tomcat with JSPs for the custom dashboard.

## **Costa Vida - Marketing Website with Online Ordering (Development)**

<http://www.costavida.net>

As one of the fastest growing Fresh Mex restaurant franchises in the Mountain West and Southwest, Costa Vida had need to continue expanding the services it offered to its franchised operations. This included the creation of a new corporate website with online ordering capabilities.

This project involved working closely with Costa Vida corporate in order to develop an engaging and dynamic website where customers and fans could come to locate a restaurant, learn more about the menu, participate in the rewards program, and place a take-out order online.

The technology stack for this project was Linux, Apache, MySQL, and PHP, with the Zend Framework, and Magento being utilized for the ecommerce portions of the website. To date, tens of thousands of Costa Vida customers and fans have visited the corporate website.

## **RSIS - Accounting Software for Shipping Resellers (Development)**

<http://www.rocksolidinternet.com>

RSIS provides highly-specialized accounting software for shipping resellers across the globe, allowing them to mark up and then market their rates for thousands of small business customers who otherwise would not have access to discounted shipping. Their software offering includes a white label back office application for managing users, tracking usage, performing billing, and doing data analysis; a white label SaaS-based front-end portal for end users to get rates and create shipments; and a series of APIs and carrier integrations for making shipments possible.

The technology stack for this project included Adobe Flex with AMF, Linux, Apache, MySQL, and PHP with the Yii and the Zend Frameworks, and integrations with numerous carrier web services. Currently this application is being used by thousands of customers around the world.

## **DHL Express - International Shipping Integrations (Development)**

Working closely with DHL Express, this project involved the creation of software to be used by international shipping resellers in order to integrate DHL services with localized carriers in Europe, China, Southeast Asian, Australia, and Great Britain.

The mechanics involved creating wrappers around localized carrier APIs and digital services so that they could be accessed via the conventional DHL Express APIs, and included work for retrieving rates, tracking parcels, submitting shipments, and generating shipping labels. A series of SOAP and RESTful web services were created using the LAMP stack to bring this project to fruition.

Currently, this software is utilized by thousands of DHL Express customers to ship internationally.

## Toptal Mentor



Bryce is a mentor in the Toptal Global Mentor's Program. This program is a partnership between Toptal and General Assembly to provide high quality mentorship for students from minority and low income backgrounds who are looking to begin their careers as professional software engineers. Bryce shows commitment to diversity in tech by mentoring a General Assembly student every week for a year, covering everything from coding tips and tricks to advice on making it in the industry.

## SKILLS

### Languages

JavaScript, SQL, Bash, PHP, Java, HTML5, CSS, Visual Basic, XML, C, C++, Perl, C#, High Level Assembly

### Frameworks

CakePHP, Prototype, Flex, Kohana, Zend Framework 2, AngularJS, Laravel, Smarty, Twitter Bootstrap, Slim, Yii Framework, JEE, Ember.js

### Libraries/APIs

jQuery, Script.aculo.us, FedEx API, UPS API, Node.js, CasperJS, AMF, Facebook API, Twitter API, Authorize.net, Stripe, Google Maps, Google+ API, Google Charts, Google Chart API, DHL API, Google API, Backbone.js

### Tools

Git, MySQL Workbench, Zend Studio, Zend debugger, Xdebug, Chrome Developer Tools, Apache, CVS, Subversion, GitHub, Adobe Flash Builder, Eclipse IDE, Adobe Photoshop, Adobe InDesign, Apache Tomcat, Nginx

### Paradigms

Service-oriented Architecture (SOA), Agile Software Development, REST, AJAX, MVC, Network programming

### Platforms

Windows, Amazon Web Services (AWS), Magento, Linux, Unix, WordPress, iOS, Android

### Storage

InnoDB, Memcached, MySQL, FlatFile, NoSQL, InfiniDB, Redis, MyISAM, MongoDB, MS SQL, Oracle

### Misc

SOAP, Networks, JSON, Security

**Master's of Business Administration (MBA) degree in Business Management**  
Utah Valley University - Orem, UT

2010 - 2012

**Master's of Science (MS) degree in Technology, IT emphasis**  
Brigham Young University - Provo, UT

2004 - 2007

**Bachelor's of Science (BS) degree in Electronics and Information Technology**  
Brigham Young University - Provo, UT

1998 - 2004

---