

# Matt Dunn

Internet Solution Creator

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## Summary

I have a fearless yet pragmatic approach to delivering innovation in startup environments, and more than twenty years of experience doing so. I have been fortunate to be able to do groundbreaking work on behalf of several high-profile clients, including Aerosmith, The Rolling Stones, Phish, ASCAP, YP.com, and CIBC, one of the largest banks in Canada. I have also built multiple online platforms, from enabling small businesses and independent musicians to sell their respective goods online, to completely upending the rules of VR to put content creation into the hands of the masses, to using AI to help change how people sell homes.

Because I've generally held multiple roles, I have the background to take on (and have) nearly any aspect in an IT organization, whether it's iterating on UX, full-stack development, database design and optimization, systems and network administration, or managing the whole team. Undertakings where I have a particular strength include SaaS architecture, e-commerce systems, digital marketing and branding initiatives, media licensing and fulfillment frameworks, and translating between stakeholders and developers.

## Professional Experience

### **Smarter Systems, Inc. (d.b.a. Infinityy) (2019 – 2025)**

Smarter Systems was founded specifically to create a new suite of products and services based largely on the later work done by EveryScape, which merges the concepts of media content and collaboration. The current product is a service called Infinityy, which is a SaaS platform focused on incorporating AI tooling into both residential and commercial real estate agent workflows.

#### *Cofounder and Principal Software Engineer*

- Created a Microsoft SQL Server database schema and .NET Framework REST API, in C# running on Azure
- Created a real estate virtual tour portal in TypeScript and React using Redux Toolkit (RTK)
- Created a multi-user real-time collaborative media viewer in Native Javascript backed by SignalR and Redis
- Integrated with multiple 3rd party data provider APIs to improve the accuracy of listing information

### **EveryScape, Inc. (2011 – 2019)**

Launched the same day as Google Street View, EveryScape was an early and long-time SaaS platform providing 360° panoramic tours of property interiors, used mostly as marketing assets for businesses who wanted to show off their facilities.

#### *Head of Engineering (2015 – 2019)*

- Performed a complex migration transferring the entire SaaS infrastructure to a new datacenter and CDN
- Created and maintained multiple sales support and marketing projects using WordPress, Python, and Salesforce.com integrations
- Improved and maintained .NET Framework REST API in C#

- Helped to develop the skills and grow the responsibilities of my team members

### *Senior Software Engineer (2011 – 2015)*

- Led the team as Scrum Master through the introduction of Agile methodology
- Became product owner of the Continuous Integration system, and the production deployment process.
- Became SME in both media conversion (ImageMagick, FFmpeg, HLS, PtGui, KrPanotools) and geographic systems (Google Maps API, GIS concepts and algorithms)
- Created a direct to consumer sales system, including integration with a payment processor, and with Salesforce.com.
- Created a new externally facing C# REST API for resellers
- Created various features in the C# REST API, JavaScript and ASP.net user interface, and SQL Server data storage layers of core products

### **Nimbit, Inc. (2003 – 2010)**

Nimbit was the premiere direct-to-fan marketing and commerce provider for independent musicians. During my time there it was truly a full-service business, in that a musician could arrive with raw recordings and leave with a published CD with an entire marketing and Internet sales solution behind it, all built entirely under one roof.

Nearly everything ran in a LAMP environment, with occasional substitutions of PostgreSQL for MySQL. In addition to several e-commerce web properties, Nimbit also maintained an entire web hosting business, which it tied into its direct-to-fan toolset.

### *Senior Developer and IT Manager*

- Responsible for the entire IT infrastructure both in office spaces and colocation environments, including the customer web hosting systems.
- Designed and implemented a sophisticated and developer-friendly server page cache system that instantly reduced the processing cost for a high volume website, while also automatically invalidating affected items in cache when underlying data changed.
- Developed and maintained widgets that allowed users to create data-driven websites without needing to learn how to do anything more complicated than insert an embed code into their HTML pages..
- Created an online application to allow customers to maintain focused and effective communication with their fans via email campaigns and through social media channels such as Facebook and Twitter.
- Developed and maintained multiple large web properties, including an online music sales portal (cdfreedom.com), and a music industry destination portal (ubl.com, the Ultimate Band List)
- Co-created a musician booking and contract creation desktop application with synchronization capabilities that allowed booking agents to work just as well on the road as they could at the office.

### **Freelance Consulting (2002 – 2003)**

- Performed a complex migration of the Aerosmith Interactive community website for Worlds, Inc. with intense time, budgetary and technological constraints.
- Wrote software to dynamically manage firewall rules to limit access to a service based on an authentication and billing system that relied on a telephone dialer and billed to the end user's telephone.
- Acted as the sole systems administrator for www.aerosmith.com while planning, setting up infrastructure, and performing a migration to a different platform.
- Performed threat analysis for multiple customers providing Internet-based services.

## **Surefire Commerce / Stumpworld Systems (1996 – 2001)**

Stumpworld Systems was an early Internet marketing and e-commerce company. Founded by musicians, it quickly sought and reached the pinnacle of the music industry and leveraged its e-commerce expertise to expand beyond it. It was acquired in 2000 by Surefire Commerce, Inc., and shut down operations at the end of 2001.

Stumpworld's server infrastructure was singularly eclectic, originally based on whatever computers and operating systems the founders could get inexpensively. As things matured, the technology platform largely settled on a Windows Server and Oracle environment, but much of the older codebase persisted, written in Perl, Object Pascal, and several other languages.

### *Systems Architect (1999 – 2001)*

- Redesigned the infrastructure of BuyItOnline.com to support a major upgrade in both the application software and the planned capacity of the hardware with the result of increased functionality and scalability.
- Acted as a liaison between the IT department and the development group during planning and rollout of a second upgrade to the BuyItOnline.com site that included underlying platform alterations and moving the system from a colocation facility near Boston to an internal data center in Montréal to simplify and reduce costs.
- Performed research in the field of applied cryptology to design and develop a custom secure server messaging protocol used for communicating order data between a particular bank (CIBC) and the BuyItOnline.com e-commerce system for secure and accurate reporting and accountability within a loyalty program for the bank's commercial customers.
- Served as the on-site liaison to CIBC's Toronto headquarters during an exhaustive user acceptance testing process that resulted in a direct connection between the bank's servers and the BuyItOnline.com system using a subset of the secure messaging protocol that I designed.
- Designed an application that allowed merchants to use an Internet browser to replace the function of a traditional credit card reader at a point of sale terminal.

### *IT Manager (1998 – 1999)*

- Led a team responsible for the operation of all network and computing services across multiple facilities for the entire company, including:
  - Internal desktop support
  - Internal mail and file servers (Linux and Windows NT)
  - Internal development servers (Windows NT, Linux, Solaris)
  - Internetworking and security equipment
  - Installation, maintenance, capacity planning and security of BuyItOnline.com
  - Management of hardware, software and services purchasing and delivery.

### *Programmer and Systems Administrator (1996 – 1998)*

- Wrote custom server software to support marketing, image project and tailoring, and e-commerce for entertainment clients such as Capitol Records, Blue Note Records, Aerosmith, Phish, and The Rolling Stones, including:
  - Customized shopping cart software.
  - Secure online order retrieval utility.
  - CGI E-mailers and other miscellaneous utilities.
- Server component for an ISP-agnostic, shrink-wrapped, e-commerce application sold off the shelf to end-users at Staples and other retailers.
- Solely responsible for daily maintenance and support of a heterogeneous computing environment company infrastructure, which required detailed knowledge of:
  - Operating Systems, including Windows, MacOS, and several UNIX flavors
  - Client Applications such as Borland Paradox, 3D Studio, Photoshop, Eudora and Netscape Navigator

- Server Applications such as Sendmail, Informix, Illustra, Netscape Fasttrack Server
- Internetworking Equipment such as switches, hubs, analog modems, digital modems, and 10Base2 (BNC) and 10Base-T (Cat-5) wiring standards.

## Technologies

Technologies	JavaScript, C#, React/Redux, TypeScript, Node.js, HTML, CSS, PHP, SQL, Shell Scripting
OS Administration	Windows, OSX, Linux
Service Administration	Salesforce.com, Azure, AWS, Github, Nginx, IIS, G Suite
DB Administration	MS SQL Server, PostgreSQL, MySQL, Oracle
Media Tools	Photoshop, Premiere, After Effects, FFmpeg, ImageMagick

## Patents

- #11153355, #11575722, #12003554: "Systems and Methods for Providing Individual and/or Synchronized Virtual Tours Through a Realm for a Group of Users"