JAY PRINCE JAY@MYSTER.IO

Startup Leadership. Scalable Services. iOS Development.

SUMMARY

LEADERSHIP Built and led software development teams managing both engineers and designers. My expertise is understanding the unique challenges of a business, developing a technology vision to meet them, and keeping my team moving towards that vision.

ENTREPRENEURSHIP I find business just as fascinating as technology. I've spent my entire career at startups getting a first-hand view of cutting-edge software and cutting-edge business models – and started several businesses of my own in order to learn even more. Solving business problems with technology is what truly interests me.

SCALABILITY Proven experience developing scalable services, from the Sony Playstation Network's multiplayer backend to AOL Video, and most recently Nirvana, the first fully distributed web platform. I've been thinking "web scale" for two decades.

iOS DEVELOPMENT Proficient in Objective-C & Cocoa Touch and able to build successful & highly regarded (4.5 stars average) apps quickly. Eight apps I've created are presently on the Apple App Store.

SKILLS

- Polygot Programmer
- Elixir & Erlang
- Objective-C
- C / C++ / C# / Java
- iOS / CocoaTouch
- Couchbase & CouchDB

- Riak & NoSQL generally
- Map Reduce
- Git & Subversion
- Unity3D
- Lisp, Perl, Python, Forth
- Functional & Object
 Oriented Programming

- Entrepreneurship
- User Experience Design
- Distributed Systems
- Parallel Computing
- Cloud Computing
- Product Management

EXPERIENCE

CTO & Founder

February 2014 to Now

- Leadership
- ▶ Elixir
- ▶ Couchbase
- UX/UI Design
- Crossplatform / Mobile

REALM (%100 remote work)

Co-founded startup to bring gaming community websites into the modern era. A social network for gamers. Mentored young co-founders in company formation, fundraising and development processes. Raised small amount of seed funding. Built intern program to increase product development speed while having no budget. Mentored 50 interns.

Developed social network platform on top of my open source Nirvana platform.



FOUNDER

2014 to Now

- ▶ Elixir
- ▶ Erlang
- Distributed Systems
- ▶ Architecture
- Couchbase

THE NIRVANA PROJECT http://nirvana.io (%100 remote work)

The Nirvana Project is an attempt to build the next generation internet platform. It started out as a web framework, sort of a distributed Ruby-on-Rails competitor, but has become a re-imagining of how internet applications should be built.

- Unique front end solution, allowing the same app to be delivered across 21 platforms from the browser to phones, desktops and even consoles.
- Fully distributed backend, with Apple style vertical integration allowing for rapid application development.
- Usable by developers with no knowledge of how to build distributed systems.

SOFTWARE ARCHITECT

February 2014 to December 2014

- Leadership
- ▶ Elixir
- ▶ Erlang
- ▶ UX/UI Design
- ▶ Couchbase

CLUTCH ANALYTICS / WINDHAVEN INSURANCE (%30 remote work)

Designed and lead a crash project to build an online sales platform. Insurance is a highly regulated industry, and our customers are both agents and consumers, requiring a great deal of business logic support at scale.

Became *de facto* CTO for the rapidly growing organization, recruited and created a cohesive team, growing from one other engineer to a peak of 12 engineers & designers. Set up modern engineering practices. Delivered product on time. Result is a scalable platform to support business target of ~45,000 agencies and 270M consumers per month.

CTO

August 2011 to January 2014

- Leadership
- ▶ Erlang & Elixir
- ▶ Map / Reduce
- ▶ Realtime Search
- Couchbase
- ▶ Objective-C
- UX/UI Design

MYSTERIO (%100 work while traveling)

Founded and lead company taking a unique approach to mobile app discovery. By treating low quality apps as if they were "spam" we used modern search engine techniques to surface high quality, highly relevant apps.

Built a realtime analysis engine for the entire iTunes App
Store. This engine scored every app on several criteria, using
raw data provided to us by Apple. The platform was flexible
enough to easily add new query types, enabling us to generate
unique feeds of apps tuned to each individual user.

MYSTERIO was funded by the Start-Up Chile incubator in 2012.



CTO

June 2008 to Now

- Leadership
- ▶ Objective-C
- ▶ CocoaTouch
- UX/UI Design

POCKETRONIC

Pocketronic develops iOS apps. Our biggest hits are Next Thing and Paleo Meal Plan, both rated 4.5 stars. Next Thing is a unique to-do app that keeps customers focused on the task they should be doing, resulting in higher productivity—and an enthusiastic fan base.



NOMAD

May 2008 to December 2013

US / EUROPE / LATIN AMERICA

Travelled the world for 6 years. I've always had a passion for travel, and I decided to see if I could travel while working full time. For the most part, the answer is an enthusiastic "Yes!"

→ Berlin → Amsterdam → Cluj-Napoca, Romania → England → Venice → Mexico → Chile

TECHNICAL LEAD

2004 to 2007

- Leadership
- Java, Ruby & Perl
- Javascript

AMAZON.COM

Worked on Amazon's product search engine, focusing on index updates, overall workflow & quality improvements. Automated testing and deployment processes for 6 international locales.

Automated testing of site search engine using Javascript. Developed Ruby on Rails application that automated the release cycle for search middleware. Led team of engineers reporting to a non-technical manager.



PRINCIPAL SOFTWARE ENGINEER & "PRODUCT CHAMPION"

2000 to 2003

- ▶ Java
- Web Crawling
- Search Engines
- ▶ Ranking & Relevancy

SINGINGFISH.COM (became AOL Video)

Sole inventor, United States Patent #6,877,002 "Fuzzy Database Retrieval"

Helped build multimedia search engine. Became company's first Product Manager. Developed company-wide product management processes. Created patent-pending system to improve search results by correlating data across databases. Led development of Java server applications for the collection, annotation and promotion of streams to the search engine.

Developed performance testing application simulating very large loads, internet traffic patterns and supporting various load scaling models to simulate real world impact on core search engine.



DIRECTOR OF DEVELOPMENT

1999 to 2000

- ▶ Java & C++
- Javascript & Lingo
- ▶ Flash

REALITYBASEDLEARNING.COM (acquired by McGraw Hill)

Idea: Give kids cartoon software that teaches & tests, then collect results nationally.

Managed the development of a national internet based educational program for the K-6 grades. Developed real time national data collection and analysis system for student performance.



LEAD DEVELOPER / EVANGELIST

1996 to 1998

- ▶ Java
- ▶ C++

RTIMEINC.COM (acquired by Sony Computer Entertainment)

United States Patent #5,841,980 Claim #6 (not credited in patent)

Invented method for maintaining accurate distributed time-base in a high latency environment. Co-inventor of massively multiplayer realtime gaming system.

Managed product plans and created formal product planning and development processes. Led developer evangelism and grew developer program from 0 to 650 members. Led team in integration of RTIME Networking engine with third party games.



LEAD DEVELOPER

1995

▶ C/C++

ZOMBIE.COM (publisher contract fell thru)

Designed and developed cross-platform, scriptable game engine for *Zork: Nemesis.* By abstracting the story line from the game logic, my design significantly reduced development time and costs.

Developed realtime polyphonic 3-D sound engine for first true 3-D computer game *Locus* simultaneously for Mac and Windows.



LEAD DEVELOPER

1994

▶ C/C++

▶ Lingo

MULTICOM.COM (went public during dotcom bubble & collapsed)

Led one of the two development teams for *Great American Cooking*. Team achieved the fastest product cycle in company history.

Developed high speed, cross-platform (MacOS/Win95) database engine. Solved performance problems of database living on CD-ROM by developing custom database and using inverted indexes for search.



LEAD DEVELOPER

1992 to 1993

▶ FORTRAN

▶ Pascal

▶ C/C++

WELCOM.COM (became Deltek)

Developed high end project management software used to schedule projects like the Boeing 777.

Led Mac platform development of flagship Open Plan App.

Also led development of a rewrite of the successful COBRA app, which was completed ahead of schedule despite several unexpected major design changes.



CONTRACT EXPERIENCE

2007

CLEVERSET

Java

Helped build product recommendation engine based on customer behavioral patterns using Bayesian Relational Networks. Cleverset

2003

THOMSON / TECHNICOLOR

JavaCocoa

▶ Objective-C

UX/UI Design & Implementation Developed Mac client to support a backend database of terabytes of sound effect audio. Product allowed editors to audition, organize and edit sound effects. Also supported librarians who tag, annotate and organize the sound effects.



Built search capabilities within very large Table Views using Lucene (part of the Jakarta project) as well as integrated to backend search capability via network.

1998

GO AHEAD SOFTWARE

→ C → TCL Developed paging module for alert escalation system. Provided general product development and bug fixes.



1996

MICROSOFT

C/C++UX/UI Design & Implementation Developed dialog support classes for Works 97 using Visual C ++ and MFC 4.0 including owner-drawn tab control and flexible spin/edit control supporting automatic data conversion.



Extended a script parsing application to automate porting code modules. Extended wizard development tool, including heavy UI work.

1994

MICROSOFT

▶ C++

Co-Developed a Rich Text OLE Control for the Cairo OS. Responsible for OLE automation interfaces. Credited with "a great amount of progress ... in RTO stability, features and performance" over the contract period.



1993

COMPAQ

▶ C

Developed printer control panel utility using the Zinc Application Framework to run under MS-DOS and Windows. Built TSR to monitor printer and report problems. Developed printer drivers and utilities.

COMPAQ

Co-Developed driver for bi-directional communications over parallel port following IEEE-1284 specifications. Created a system for localizing the executable at installation time, eliminating need for separate versions for each country.