# **Christopher Robison**

## Chief Technology Officer at D Harris Tours

### Contact

#### **Phone**

415-300-0180

### About

I am a highly skilled internet software engineer and web application architect. I have experience managing small and large teams at NetOasis, Genetic Savings & Clone, Interactivate and Mediaplex.

I understand the business ramifications of operational issues in addition to understanding the systems and technology they support. My exposure to all aspects of business from the customer to the backend to the frontend has enabled me to build systems and software that look at the big picture and increase the bottom line.

I have been pushing the limits of Javascript, CSS, HTML since their inception and, more recently, leveraged the power of web 2.0 technologies (AJAX / XMLHttpRequest / JSON) to architect and develop web applications. My server-side skill set is as strong, if not stronger, than my front-end. I have extensive experience with object oriented programming and have implemented just about every design pattern known to man. Expert with most modern programming languages such as Javascript, Java, PHP, C#, Swift, Python and others. I'm also a pretty good Unix (Linux/FreeBSD/Solaris) systems administrator.

Specialties: Javascript (nodejs & client), NoSQL (MongoDB, redis), business process management & automation, web based software, programming, software frameworks, XML, DOM, PHP, Perl, Javascript, AJAX

### Profiles

### linkedin

twitter

crobison

thechrisrobison

### Work

Feb 2020 - Nov 2020

#### Chief Technology Officer [CTO]

D Harris Tours is a shuttle bus transportation company which offers 22-44 passenger buses for hire. The majority of their business is derived from schools (student event transportation) and local tours. 10 years ago, I developed and implemented software that allowed D Harris to grow from 2 buses to 12. But the system I implemented 10 years ago was not made for the increased number of drivers, buses, customers and trips the company had grown to serve. They were quick to hire me on as their CTO where I updated

and enhanced their systems with real-time bus data, automated maintenance notifications, automated trip confirmations and notifications via email and SMS and more. After reviewing the first months trip data, I found that drivers would often sit idle for 4-5 hours, waiting to pickup students they had dropped off at a football game or band practice. I developed an algorithm to identify these idle times and match them with jobs. I offered drivers an extra hours pay if they did the extra trip. This nearly doubled the daily revenue until the COVID-19 shutdown.

Jun 2010 – Feb 2020

#### Manager, Software Engineering

Having worked at the same company for 10 years I wore many hats and performed many roles. By the time my team was cut due to COVID-19, I was responsible for architecting the infrastructure and code that serves millions of mobile and rich media ads each day. The following are descriptions of just a few of the roles and accomplishments I feel highlight my time there. Mediaplex was an online advertising company that was started in 1999 and was quite successful during the next couple of years. So successful that in 2001, Mediaplex was acquired by ValueClick. The servers and software that ran the ad serving portion of the business had been setup in 2000 and not had any major updates in almost a decade and their tech stack was showing its age. When Mediaplex first started, ads were simply text with links, perhaps a background image. But the surge in popularity of "Rich Media" ads that began hitting the market in 2009 was beyond what their backend was designed to serve. Competing ad vendors who could serve rich media ads began stealing away valuable business, costing the company revenue and customers. I was hired to lead their Rich Media effort and help modernize their ad serving and metric collection. I architected and deployed a RESTful API for serving rich media ads and built out scalable backend servers and services to handle integration with existing infrastructure. A large part of Rich Media ad serving and reporting is performed in the client and this required creating a small but powerful cross-browser client-side ad loading framework that worked in tandem with the new backend API. After stablizing the infrastructure, I then managed engineering resources to work with the product services team to ensure the successful deployment of all Rich Media advertising campaigns. The Rich Media enhancements were a great success on all counts, increasing revenue by \$1.2 million in the first year alone. By the time Rich Media ad serving was running smoothly, demand for mobile ads was steadily increasing and I was tasked with implementing a mobile ad solution. I convinced management to have our company join the IAB [<a href='https://iab.com' target='\_blank'>https://iab.com/</a>], a consortium of online advertising companies that develops industry standards. We participated and were instrumental in defining the updated MRAID 2.0 standard for mobile ad serving which is still currently in use and the defacto standard for mobile ad serving. I wrote the MRAID compliant SDK's for both iOS and Android as well test apps for both platforms to be used internally and by our customers preview ads in a mobile environment before deployment. 

Aug 2007 – Jun 2010

#### Web Architect

Initially brought in for a 3 month contract to architect and migrate the Mindjet website from PHP to an ASP.Net solution. My role quickly grew into heading up Mindjet's foray into the Software as a Service (SaaS) arena-- Mindjet Catalyst.Mindjet Catalyst is web-based mindmapping software that allows real-time multi-person sharing, collaboration and editing of mindmaps without leaving your browser. The Catalyst client

canvas is written in Flash and written to via Javascript frameworks and API's which handle communication with the server. The system has been designed such that it is poised to utilize only open standards with HTML5, CSS3, canvas/VML and SVG. Server-side built with Java/JSP however a large portion of the account handling still resides on the .Net platform requiring the definition and build-out of RESTful services to bridge the two systems.

Mar 2006 – Aug 2007

#### President / Founder / Architect / Engineer

<div class="SMALL DESC">Contracted software development and consulting. Most contracts were support for previous positions (such as with Interactivate), custom content management systems and business process management applications. The following is a small sampling of some of the work completed (Login using 'guest@simpsf.com' for the email address and 'guest' as the password): <b>GC Homes</b> - This project uses the <a href='http://www.dojotoolkit.org/' target='\_blank'>Dojo Toolkit</a> to allow home contractors to access current home specification documents. <br/> Application: <a href='http://gch-dev.netoasis.net/app/' target=' blank'>http://gchdev.netoasis.net/app/</a><br/>b>Bay Docs - Document Preparation Service</b> - Many tools to help facilitate document preparation for reverse mortgages. <br/><br/>Lender Tool: <a href='http://bay-dev.netoasis.net/lenders.php' target='\_blank'>http://bay-dev.netoasis.net/lenders.php</a> (allows editing of lender information by clicking on cell)Form Definition Tool: <a href='http://baydev.netoasis.net/fields.php?id=50' target='\_blank'>http://bay-dev.netoasis.net/fields.php? id=50</a> (allows defining calculations and field mapping for various forms) Calculator: <a href='http://bay-dev.netoasis.net/HUD/calc.html' target=' blank'>http://bay-dev.netoasis.net/HUD/calc.html</a> (calculates potential reverse mortgage values)DB Utility: <a href='http://baydev.netoasis.net/admin/dbedit/' target='\_blank'>http://baydev.netoasis.net/admin/dbedit/</a> (generic database table tool) <b>Tzero Technology</b> - Customized content management system.<br/>vul> Website: <a href='http://www.tzerotech.com/site/'</pre> target='\_blank'>http://www.tzerotech.com/</a>CMS: <a href='http://tzerodev.netoasis.net/'target='\_blank'>http://tzero-dev.netoasis.net/</a> <b>Metrika</b> - Customized content management system.<br/>
- Website: <a</li> href='http://www.metrika.com/site/' target='\_blank'>http://www.metrika.com/</a> CMS: <a href='http://met-dev.netoasis.net/' target='\_blank'>http://metdev.netoasis.net/</a></div>

Jul 2004 - Mar 2006

#### **Technical Director**

<div class="SMALL DESC"> GS&C afforded me the opportunity to apply my systems integration and programming skills to the new genetic sciences industry. I was responsible

for managing and integrating diverse genetic equipment into our server network and providing the data to both internal and web-based interfaces: 
 <b>Clonesoft</b>
 Architected and implemented client/server based web-based application using XML as the data transport mechanism to automate and manage the animal gene-banking and feline cloning business processes utilizing the latest in AJAX technologies.
 <b>CatBank</b></b></d></d></d></d></d></d></d>
 target='catbank'>http://www.catbank.org/</a> Designed and developed framework to

quickly implement the front-end and back-end for this database driven feline DNA

identification website. Back-end requirements included integration with various genetic analysis hardware including the Applied Biosystem Genetic Analyser 3130
<b>Retro vs. Metro</b> - <a href="http://www.retrovsmetro.org/" target='rvm'>http://www.retrovsmetro.org/</a> Implemented all backend code for this online companion website to the New York Time's bestseller: Retro vs. Metro - The Great Political Divide in America. Required access and aggregation of various data items scattered across the Internet (such as the Iraq war dead count and real-time government deficit counter)

Technical Director

Nov 2001 - May 2004

<div class="SMALL DESC"> As Technical Director for Interactivate, Inc., my responsibilities were extensive and included, but were not limited to: Designed and architected network infrastructure using both Windows servers and various legacy Unix boxes. Built out server clusters and managed a farm of over 60 machines including a SAN. San. & systems analysis tools maintenance of customer websites, DNS, and email services. developed email marketing application using 3 tier architecture and XML and XSLT for transporting and rendering email messages and associated web pages. As of December, 2003, the Activatemail system sends and tracks over 1,000,000 requested messages per day between 89 clients including Sunkist Growers, The California Avocado Commission, San Diego Zoo and many more. which allows Interactivate developers to create their own dedicated web sandboxes via a web interface. Automated CVS checkouts and local network mounts to development sandboxes rounded out this implementation. Solaris, FreeBSD & Windows NT in a heterogeneous environment implementation, migration and maintenance for Interactivate's internal and external network infrastructure. Vorking with vendors, developers & 3rd party integrators. Naintain and monitor over 50 hosted client web sites and dozens of web applications Identifying & resolving network related problems Responsible for backup implementation and recovery strategy & procedures Required to support high volume access & availability characteristics as well as identifying & resolving system hardware & software problems the full availability of DNS, SMTP, HTTP, POP & IMAP servers security for all Interactivate networks </div>

Apr 2000 - Oct 2001

#### **Software Architect / Technical Director**

<div class="SMALL DESC"> The Financial Cafe. Com is an Online Financial Broker/Dealer which provides free online market orders. Initially brought in to build a custom CRM application for their support staff, the application quickly grew to encompass every aspect

of the company from CRM to billing to email handling and website layout and integration with 3rd party services. My responsibilities included, but were not limited to: 
li>Designed and implemented web-based network management & systems analysis tools
li>Required to support high volume access & availability characteristics as well as identifying & resolving system hardware & software problems 
li>Vorking with vendors, developers & 3rd party integrators. 
li>Installation & administration of Solaris, FreeBSD & Windows NT in a heterogeneous environment

maintaining network equipment | II> Responsible for the full availability of DNS, SMTP, HTTP, POP & IMAP servers the companies internal and external network infrastructure. automation of administrative functions via shell scripting & Perl backup implementation and recovery strategy & procedures Mysql databases (one master, multiple slaves) integration of multiple third-party application services into the company's website. In addition to the engineering and administration duties listed above, I was also responsible for the architecture of their network infrastructure in addition to developing the software and business processes to manage and maintain the companies website, stock trading web application, customer service web application and the corporate intranet. Lead team of developers and engineers to build out a customized NetOASIS web-based CRM application, a trouble-ticketing systems (for automated work flow and business process automation), a web based site administration tool and a number of other web-based applications which empowered the end-user to perform much of their own administration (such as changing passwords, mailing list memberships, etc). </div>

Mar 1998 – Apr 2000

#### Senior Web Developer / Administrator

<div class="SMALL DESC"> Food.Com was an nationwide online food ordering and delivery service. Initially hired as a 'Senior Web Developer' to redesign the Food.Com web application engine. My job description was quickly expanded to include administration of the engineering and development processes, hardware and environment due to in-house IT problems. Responsibilities included: li>Developed 'FUDGE', the 'Food.Com Ubiquitous Dining Guide Engine' which was used by thousands of restaurant reviewers to enter and maintain Food.Com's dining guide database. li>Setup of automated development environment using web-based tools li>Development of tools and utilities (both web based and command line) to automate development efforts Migration of code-base from Objective-C/WebObjects to Java li>Wrote and maintained various web-based backend tools for maintaining accounts and order information

May 1996 – Feb 1998

#### **Web Engineer**

<div class="SMALL DESC"> Slip.Net was one of the earliest Internet Service Providers in the San Francisco Bay Area with a client base well over 30,000 users. My roles and responsibilities were divided between system administration and web development. As the <i>Web Administrator</i> I was responsible for shared administration of server farm of 30+ machines including Sun servers and Intel PCs, all using Solaris. I was also responsible for all web-based software, E-commerce, network accessible databases, secure server certificates, web server maintenance, and more. In addition to these administration duties, I was also given a myriad of development projects, including the renovation of the existing system of disassociated and unwieldy collection of flat text db files and dbm's that constituted their 'client database'. I developed an easy to use and coherent system of procedures, tools, scripts, and interfaces built on top of a relational SQL database. The scope of this project is beyond this resume, however, if you'd like to see a small sampling of the web applications I developed, just feed the following URL's into your browser (Username: demo, Password:demo):<br/>
<table cellspacing="0" cellpadding="3" border="0"> <div style='position:relative;width:40px'></div> <span

class="SMALL"><b>Slip.Net Account Control Center:</b></span> <!-- <td> <span class="SUBTOP"> <a

href="http://www.slip.net/control/main.html">http://www.slip.net/control/main.html</a>
--> <span class="SUBTOP"> <span class='offline' title='OFFLINE'>OFFLINE</span> </span> 

 <span class="SUBTOP"> <bspan> 

 <span class="SUBTOP"> <bsplip.Net</td>

 Signup Wizard: </b> </span> 
 <span class="SUBTOP"> <span class='offline'</td>

 title='OFFLINE'>OFFLINE</span> </span> <!--<td> <span class="SUBTOP"> <a</td>

 href="http://www.slip.net/nosetup/">http://www.slip.net/nosetup/</a> </span>--> 

 <span class="SUBTOP"> <br/> <br/

Apr 1995 - Apr 1996

#### Founder / Chief Developer

<div class="DESC SMALL"> As founder and President of the NetOASIS Software Co. I was responsible for every aspect of running the business from graphic design to programming to market research and client solicitation. The primary focus of the company was development of web based applications and the integration of a clients systems into a computer based environment. We also offered freelance programming services, web hosting, web site design and maintenance, and setup and installation of intranet hardware and software components. Specialized in online commerce systems and I have installed, upgraded and maintained online payment servers by Cybercash, First Virtual, and Verisign. Clients included: <a href="http://www.symantec.com/">Symantec</a>, <a href="http://www.netoasis.net/hosts/kingmedia/">King Media</a>, <a href="http://www.exploratorium.edu/">The Exploratorium</a>, <a href="http://www.aspsky.org">The Astronomical Society of the Pacific</a> and more.

Nov 1994 - Jun 1995

#### Senior Developer / Systems Administrator

<div class="SMALL DESC"> Senior System Administrator/Programmer for a network of mixed SunOS/Solaris/NT servers. Also head of programming staff. Responsible for maintenance of all network hosts, virtually hosted web, email, ftp, and gopher services. Maintained server statistics, CGI scripts and eventually developed online retail software that is used for dozens of web catalogs. Other job functions included working directly with clients during development of their software and site, designing of graphics and layout of web sites, implementing new and emerging technologies on clients sites, and handling some customer technical support issues. </div>

### Volunteer

### San Francisco Elks Lodge #3

Mar 2010 - Mar 2011

**Youth Activities Co-Chair** 

As youth activities chair I was responsible to organizing and holding events to raise money for local underprivileged children living in the Tenderloin. With the help of the SFPD, we built bicycles to give as Christmas presents which were very well received. We raised over \$34,000 for the children in that year.

### Education

### California State University-Chico

**City College of San Francisco** Dec 2008 - Dec 2009 Japanese, Business **Butte College** Dec 1987 - Dec 1989 **Computer Science, General Education** Paradise High School Dec 1983 - Dec 1987 **General Studies Awards Computer Science Award** May 1988 Awarded by Paradise High School First recipient of the Paradise High School "Computer Science Award" for developing a data application to track school resources that ran on an Apple IIe. Skills **Information Mapping jQuery** HTML5 **Firebug** Google API **OAuth Technical Leadership** Entrepreneur **MySQL** Exim HTML 5 AJAX **Entrepreneurship Software Development** SaaS **Agile Methodologies JSON JavaScript** PHP **Mobile Applications Cloud Computing CSS** C# **Apache** Linux **MongoDB Python** Perl

**SMTP** 

**Web Services** 

**Databases** Unix

**Design Patterns HTML** 

**JSP** Software as a Service

(SaaS)

**SQL** Java

**Android Development** iOS Development

**Software Development** React.js

Life Cycle (SDLC)

React **AngularJS** 

**Cascading Style Sheets Project Management** 

(CSS)

**Software Project** Leadership

**Management** 

**Management** Integration

#### Languages **English**

Native or bilingual

#### Interests Making things

**3D Printing** 3d printing raspberry pi arduino 3d printing

laser cutting/etching maker

### Golf

golf high score senior tour

### References

Chris has a broad understanding of Internet technologies and is generous with knowledge sharing. Equally at home working with Web Services, XMPP and server-side applications as he is working with CSS, JavaScript and the most recent HTML5 for devices. He brings a lot to a Web dev team and can pinch hit in a number of chairs.

FDM

SLA

Kevin Ready (Software Developer and Consultant)

This guy has some soriously mad coding skills

This guy has some seriously mad county skins.

Thomas Weaver (Network Provisioner at Twitch)

His system is well oil; all my web services are working with no down time. He offers all the greatest gadgets, ideal environment for a programmer like me.

- Benoit Marsot (Senior Developer R&D at Medsphere Systems Corporation)

Extreme knowledge of Perl and UNIX environment, fast programmer, brilliant manager.

- Benoit Marsot (Senior Developer R&D at Medsphere Systems Corporation)