

# ROBERT NICHOLSON

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## BACKGROUND

I excel at recruiting, team building, leadership, and problem solving. I have managed teams ranging from three to fifty people, including distributed and remote teams. I have excellent written and spoken communication skills.

I have a solid knowledge of business, finance, and legal issues (HR, IP, contracts, etc.) that come into play in managing a team in the corporate world.

I am also an accomplished hands-on coder and architect. I've worked professional with dozens of languages and scores of tools and APIs, and I teach several core programming and data science courses at San Jose State University.

*For most of my career, I held a series of increasingly responsible engineering management positions, including director-level roles in large companies, and VP positions in Internet start-ups.*

*I have also provided strategic consulting and hands-on software development services for small and medium businesses. This has allowed me to work with a wide range of technologies and business models. Most recently my focus has been on Internet consulting, and architecting and developing web applications.*

## SELECTED JOB HISTORY

**Lecturer - SAN JOSÉ STATE UNIVERSITY**  
Partially Remote

**Current**

Lecturer in Computer Science, Computer Engineering and Applied Data Science departments. Courses taught include:

- CMPE 135 - Object-Oriented Analysis and Design (upper division)
- CMPE 152 - Compiler Design (upper division)
- CMPE 220 - System Software (graduate)
- DATA 220 - Mathematical Methods for Data Analytics (graduate)
- DATA 230 – Data Visualization (graduate)
- CS 174 – Server Side Web Programming (upper division)
- CMPE 280 - Web UI Design & Development - guest lectures (graduate)
  - WordPress Programming and Development
  - Search Engine Optimization

**Co-Founder, VP of Technology - LUNAGRAPHICA INC\***  
Full Remote

Current

Also acted as corporate secretary and treasurer.

Migrated the company's business from an initial focus on graphic design to the current business model, where web design and development accounts for 75-80% of revenues.

Proposed and led the shutdown of the company offices and a transition to an all-remote team. The entire company has worked remotely for more than 6 years.

Developed a job tracking and management system that has handled more than 12,000 jobs.

Contracted for a major Silicon Valley computer manufacturer to transition internal websites and applications from Drupal to WordPress.

*Under the umbrella of LunaGraphica, I provide development and strategic consulting for small to medium businesses and Internet startups, while directing the web services operations for the company.*

*In my roles as a consultant, I have acted as interim CTO for several early-stage start-up companies, and managed offshore development teams.*

\* In 2022, LunaGraphica was acquired by Metro.Agency; I am now acting as a consultant

**Co-Founder, VP of Operations - RATINGZ INC**  
Full Remote

Also acted as corporate secretary and treasurer.

Established processes to launch new vertical rating-and-review sites, reducing the time required to set up a site from 2 days to 2-3 hours.

Negotiated agreements with domain experts to launch rating and review sites for three specific subject areas, including some of our most successful sites.

**Project Librarian - KBR INC (NASA Ames)**  
Partially Remote

Managed and maintained the project library and documentation repository for the F6 project; defined the content organization framework and tag set.

The goal of the F6 project was to develop an architecture and software system to allow communication and cooperation within a network of satellites. The project was jointly managed by DARPA and NASA, and was also an experiment in using open source development.

## **Architect / Developer - CONSUMER BANKRUPTCY COUNSELING**

Full Remote

Developed the first expert system to provide online bankruptcy counseling. After extensive review, the system was approved for deployment by the Trustees Office of the United States Department of Justice in 2008.

At its peak, the site provided approved counseling for approximately 10% of the bankruptcy applications in the United States.

Added a second service, post-filing debtor education, in December 2013.

## **VP of Engineering - RED HERRING, a venture-funded startup company**

Following Red Herring's acquisition of StockMaster.com, where I was VP of Engineering, I took responsibility for the combined engineering organization.

Merged and streamlined the engineering teams, and put in place tools and processes to unify code and content management. Put in place a streamlined Agile/DevOPS development and release process.

Defined a uniform architecture for syndicated content acquisition and delivery, eliminating custom code previously required for each content partner.

Put in place a scalable, replicated database architecture, multiplying system capacity by 4X and eliminating downtime due to database failures.

## **VP of Engineering - INTERSURVEY, a venture-funded startup company**

As VP of Engineering, led the development and deployment of the company's core technologies. InterSurvey managed a panel of over 50,000 households who regularly participated in web-based surveys for consumer product companies. Responsible for engineering, QA, and operations.

Designed a survey creation process using XML authoring tools (including creation of a DTD for a new survey language).

Created a survey delivery system using Java servlets running on Solaris 7; data was stored in an Oracle 8 Enterprise database.

### **Senior Manager/Acting Director - SUN MICROSYSTEMS**

Successfully managed the transition of Sun's CORBA engineering group to a new focus on products for Internet Service Providers and hosting companies.

Released the Solaris for ISPs application package, including Sun WebServer, Sun Internet FTP Server, Sun Internet News Server, Sun Performance Monitor, and an integrated management console using CORBA to communicate with and manage the servers (aimed at the ISP hosting market).

Managed over 50 engineers and a budget of over \$8 million.

### **Engineering Department Manager - IDS, an SGI / AT&T joint venture**

Responsible for a distributed team of SGI and AT&T engineers at three geographic locations, as well as a partner engineering team located in Japan.

Managed the development of a fully functional, low-cost interactive TV system supporting NVOD (Near video-on-demand), e-commerce, and parental control.

Converted SGI's CORBA-based client-server architecture to a server-side system with "dumb clients" to reduce cost of deployment.

### **Director of Multimedia Software, ORACLE CORPORATION**

Proposed and built a department to introduce multimedia data types (image, audio, and video) into Oracle products.

Proposed and managed the development of a product to produce and distribute online documents. "Oracle Book" generated \$8.5 million in revenue in its first year.

### **Engineering Manager - SYDIS INCORPORATED, a venture-funded startup company**

Designed and managed the development of an integrated system including office automation applications, voice messaging, intercom, and telephone functions.

Defined a graphical desktop environment that anticipated the design of modern office systems. Designed an application architecture and framework to allow applications to be incorporated into this environment. The framework included extensible support for new document and media types. Written in C on a Unix platform.

Based on my work at Sydis, I wrote articles and papers published in *ACM Transactions on Office Information Systems*, *USENIX Conference Proceedings*, and *Byte Magazine*.

## Senior MTS - HEWLETT-PACKARD

Designed developed programmer tools for transaction-oriented applications.

Created a new “transaction by example” language and system for transaction-based applications, based on the work of Moshé Zloof and others at IBM research.

## EDUCATION

MS, Electrical Engineering (Computer Engineering option), Stanford University

BS, Computer Science (with Honors in English), California State University, Chico

Formal Management training programs at HP, Oracle, Silicon Graphics, Sun Microsystems, San Jose State University.

## ADDITION ACCOMPLISHMENTS

Patent: A Hyperlocal Rating System - Filed October, 2014.

Board member & advisor, Argos Security Inc, a Sarbanes-Oxley consulting company.

Co-founder and board member for OVCAG, a non-profit California arts corporation.

## SELECTED PUBLICATIONS

- California Mission Guide*, WYGK Press. (Book) July 2014
- Effective Websites for Artists and Art Groups, 2<sup>nd</sup> Edition*, WYGK Press. June 2010
- Marketing Art on the Internet*. ArtCalendar magazine. May 2008
- Effective Websites for Artists and Art Groups*, WYGK Press. April 2006
- Parallel Processing and Web Server Scalability*. SunWorld Conference. June 1999
- Electronic Publishing With Oracle BookViewer*. Oracle Corporation. June 1991
- Providing Portable Multimedia Support Through the Oracle Toolkit*. American Society for Information Science Mid-Year Meeting. April 1991
- An Object Storage Facility for the HyperBook System*. American Society for Information Science Mid-Year Meeting (with Walter Chang). April 1991
- Design Principles for a Platform Independent GUI Toolkit*. Dr. Dobb's Journal. January 1991
- The Oracle Toolkit: Bridging the GUI Differences*. Oracle Corporation. January 1990
- Designing Multinational Applications*. IEEE International Conference on Computers and Applications. Beijing, China, 1987 (with Karen E. Chez). June 1987
- Usage Patterns in an Integrated Voice and Data Communications System*. ACM Transactions on Office Information Systems. July 1985 - <https://dl.acm.org/citation.cfm?id=4231>
- Sydis Application Programmer's Workbook*. Sydis, Incorporated. July 1985
- Sydis User Interface Standards*. Sydis, Incorporated. January 1985
- The Clipboard Data Interchange Facility*. USENIX Winter Conference Proceedings. January 1985 - <https://www.usenix.org/legacy/publications/bibliography/byAuthor.html>
- Integrating Voice in the Office World*. Byte magazine. December 1983
- Goblin: a Small System Fantasy Game*. Personal Computing magazine. December 1980
- Creating a Fantasy World on the 8080*. Byte magazine. July 1980
- Planned Programming*. Personal Computing magazine. June 1979
- ATOM: a Component Approach to Software Systems Design*. IEEE Spring CompCon (with Karen E. Chez). April 1979