

Ronald Paul Reck

4387 Poplar Tree Court
Chantilly, VA. 20151

Voice 703.378.8723

rreck@rrecktek.com

Data 703.378.8723

SUMMARY

A UNIX/Linux guru with two degrees in Linguistics, is both an author and enterprise architect. The last five years were spent focusing primarily on Intelligence Community and Law Enforcement needs by implementing and driving data standards for data and knowledge representation. Successful strategies include semantic interoperability between different data sources, communities of interest, and mappings between geographical and political data orientations. An invited expert to the World Wide Web Consortium's GRDDL working group conducts seminars on semantic web technologies like the Resource Description Framework (RDF), and taxonomy/ontology creation and management.

CORE SKILLSET

Operating systems: Most POSIX System V and BSD variants (UNIX) - Sun Solaris/SunOS, *BSD, Linux

Databases: MySQL, Oracle, PostgreSQL, SyBase, BDB, DBM, Parka

Languages: Perl, C & Bourne shells, PHP, Tk, Java, Sed, AWK, SQL, Pascal, C, Basic, LISP, Prolog

Internet & Web expert: Drupal, 4store, Perl, CGI, HTML, XML/RDF/OWL, CSS, Javascript, search engines, database, intelligent agents, knowledge representation, security, firewalls, IPTables, data conversion, squid cache, TCP/IP, SIP, VOIP, QoS, Asterisk, Configuration Management, Virtualization (VMware/VirtualBox).

Entire GNU UNIX: Shell, shell scripting, administration, security, tuning, disk management, application development, full software life cycle, technical documentation, service level agreements, content management, knowledge representation.

Participant: W3C GRDDL working group (invited expert status), StratML Working Group, Contributing Editor-Financial Information Services Division of the Software & Information Industry Association.

Clearance: Top Secret / SCI (Lapsed)

EDUCATION

EASTERN MICHIGAN UNIVERSITY

Master of Arts - English Linguistics 04/07

- Linguistics - Computational linguistics, morphology/syntax, theoretical syntax.
- Natural Language Processing, computational & rule based algorithms, information theory.
- Syntactic parser in Perl, verb phrase structure, cross-cultural temporal abstraction, semantics.

WAYNE STATE UNIVERSITY

Bachelor of Arts - English Linguistics 06/92

- Linguistics - theoretical syntax, Government and Binding (GB) & Transformational Grammar (TG) syntax, morphology, semantics.
- Extensive coursework in Psychology, Philosophy, Chemistry, Biology, Literature, English.

WORK EXPERIENCE

RRecktek LLC.

Confidential Client

- Contributed to the design of cutting edge white hat security methodologies.
- Architected, managed & implemented trust based system for determining information veracity.
- Invited expert in good standing for the W3C's Social Web Incubator Group.
- Developed system for alignment of sentiment in financial reports.

Inxight Federal Systems – SAP Government Support and Services

Lead Client Manager ~ 03/08 – 09/09

- Designed and Implemented distributed sentiment analysis framework used for the analysis of 800 thousand Reuters articles.
- Promoted and shaped the StratML standard.
- Implemented controlled vocabularies for sentiment adjectives, verbs and nouns.

Collexis Inc.

Chief Technology Officer- Americas~ 02/07 –02/08

- Responsible for product packaging and delivery throughout North America.
- Promoted SKOS compliance as a supported format.
- Forged an enterprise approach to thesaurus management.
- Responsible for new domain thesauri:
 - Aviation, Vehicles, Weapons, Geographic Entities, Gangs, Nationalities, Races

RRecktek LLC.

Factiva

Consultant ~ 11/06 –Present

- Designed RDF capability for Synaptica Knowledge Management Tool.

Intelligence Community Metadata Working Group Staff

Senior Software Engineer ~ 1/05 –10/06

- Tasking under Executive Order 13356.- Technologies include XML, RDF, OWL, XSLT, VMware, Authority Files, Requirements, Design, Development, Security, COTS, Validation, Standards.
- Develop Strategies and Standards for data sharing for 16 Intelligence Communities.
- As technical Lead for Controlled Vocabulary Management System responsibilities included:
 - Formulation of detailed formal requirements.
 - Review and selection of COTS product for vocabulary management.
 - Creation of use cases, test cases, quality control, access control, workflow, documentation, data models, concept of operations, accreditation, integration, and deployment.
 - Standards based vocabularies using Z39.19 and Zthes specifications.
 - Extension of system to include Simple Knowledge Organisation System (SKOS) format.
 - Modeling of International Standards Organization and OASIS standards.

Technical Lead ~ 11/04 – 9/05

- Seattle InX Project for Naval Criminal Investigative Service – Data warehouse of law enforcement data from a plethora of agencies. Brought in a team of contractors to re-architect and implement J2EE

application front ended by Tomcat, Sun Application Server, Web Logic. Technologies include XML, SVG, BPML, L&C, MS Windows, PVCS, Ulytix, Oracle, Sun Solaris, Intalio, Initiate, OpenSTA, Quality Control, UAT,SSL, Certs.

Science Applications International Corporation

Senior Software Engineer ~ 03/03 – 12/04

- Re-Engineered 100+ node network and all supporting services – NFS, NIS, DNS, Raptor Firewall, HTTP, NetScreen VPN, CVS, Clearcase, Ntop, AMANDA. Redhat, Solaris, IRIX.
- Integration and testing of all major components of Terrorist / Total Information Awareness (TIA) Software components.
- Created comprehensive documentation for the implementation of Structured Discovery Thread – Analysis of unstructured data – Latent Semantic Indexing, JBoss, JMS, RSS, Oracle, data conversion, metrics.
- Proposed environment and security standards for RDEC Program Redhat AS systems.
- Designed and implemented application for semantic analysis of unstructured data using Tokenization, Stemming, Self Organizing Maps, and Wordnet:: Similarity in Perl.
- Created tool to convert XML Topic maps and RDF into Scalable Vector Graphics.
- Designed and Developed NISPOM security compliance strategy adopted by Future Combat Systems.

University of Maryland, Institute for Systems Research

Project Leader – MINDLAB/MINDSWAP (mindswap.org) ~ 02/02 – 03/03

- Designed and deployed web site using PHP & Redland RDF Application Framework.
- Created online search engine for searching across the DAML ontology library.
- Created Windows software for converting Excel spreadsheets into RDF format.
- Designed and deployed entire online infrastructure.
- Designed and deployed complex data conversion procedures for Parka database.
- Attained World Wide Web Consortium membership status.
- Prepared Parka research for presentation at First International Semantic Web Conference (ISWC).

ITisOpen (Optimally Open Solutions Inc.)

Director of Web Architecture ~ 05/01 – 02/02

- Designed process for web publication from Adobe Framemaker.
- Designed and implemented corporate Intranet.
- Designed, documented and implemented 2 tier web publication architecture.
- Designed and implemented search engine for Mailman (mailing list software).

Winstar Communications Inc.

Principal Information Architect ~ 07/98 – 03/01

- Designed and implemented complex system and process for the publishing of technical information.
- Designed and implemented scalable system for web representation of infrastructure topology.
- Drove corporate data standards – WWW publishing standard, Network File and Directory Naming.
- Designed and coded scalable robust solutions for textual navigation and organization.
- Firefighting, Y2K network readiness, Collector, billing systems, contract/document management.
- Perl 5, Sun & Solaris, BMC, Linux, BSD, Samba, TCPD, Apache, GNU toolset, Python/Zope, Frontpage97, Frontpage98, Word 7.0 & 7.0a, Excel 7.0, Excel 98, Word 98, AutoCAD R14, Paintshop Pro, Adobe Photoshop.

The Allied Group Inc.

Systems Engineer ~ 08/99 - 03/00

- Earned Sun Enterprise and Workgroup Certification, BMC Patrol Certification.
- Sun high-availability Oracle cluster tuning.
- Corporate Intranet lead architect (170 sites), WWW standards and content management.

Electric Press Inc.

Enterprise Architect ~ 11/98 - 01/99

- Designed and implemented system for making snapshots of operating environments.
- Designed migration path for re-engineering infrastructure - security, network, backups.
- Configured and installed Sendmail, TCPD, HTTPD, SSHD, GCC, GNU tools.
- Electronic Commerce and recovery of United States Information Agency from HACKER attack.

Federal Communications Commission

Webmaster and Senior UNIX Administrator ~ 03/98 - 07/98

- Jurisdiction in both Universal Licensing System and FCC Auctions.
- Designed and implemented standards for development, staging, and production environments in accordance with Inspector General guidelines.
- Designed, coded, and maintained web and system security, web metrics.
- Key encryption, advanced networking, firewall, proxies, security standards.
- Sapphire, Netscape, Sybase, Jaguar, Java, TCPD, rsh, DNS, HTTP, HTTPS.

Digital Encryption Systems Inc.

Director of Online Services ~ 04/97 - Present

- Designed and deployed system for the population of legal forms from MS Access.
- Designed and implemented Legato/ORACLE hot backups for STANDARD & POOR's 2M dollar webfarm.
- Designed, coded, and maintained web security, database, metrics, and searching systems.
- Designed and supervised Legacy extraction task from MUMPS using NeXt web objects.
- Designed, coded, and maintained real-time reporting systems for modeling environment.
- Staged systems development, security, SSH, SSL, PGP, NFS, DNS, Sendmail, PERL.
- TCP/IP, Apache, Netscape, Open Market, Solaris 2.6, NeXt, FreeBSD, Linux, TIS Firewall.
- Web publishing, data conversion, scalable architectures, and COTS integration.

The Council of Better Business Bureaus

Senior Technology Expert - Internet Systems ~ 06/97 - 03/98

- Designed, coded, and maintained web security, database, statistics, web publishing, text searching systems for 150+ Bureau websites.
- Designed, coded, and maintained web publishing systems for sites up to 225 pages.
- Data conversions, proprietary log parsing, web monitoring of fax server and system errors.
- Designed, coded network monitoring system that aided in recovery of \$17K from our ISP.
- Staged Solaris 2.5.1 environment for development in Java, Perl, and UNIX shell with GNU tools.

Eastern Michigan University • Texas A & M University

Technical Editor of LINGUIST, Senior Editor, Systems Engineer ~ 10/92 - 02/97

- LINGUIST is the largest academic newsletter on Internet, and arguably the most influential of journals in the field of Linguistics. Over 8000 subscribers to 2000+ issues per year = 10 per day.
- Several million messages annually, LISTSERV, EMAIL systems.
- Ultrix, SunOS, Solaris, shell scripting, all C and Bourne shells.

Inside Ford Motor Company 's WWW Organization

Data Center Administrator, New Media Architect ~ 11/96 - 02/97

- Staging, maintenance, and support of entire data center Solaris (2.5.1) environment.
- Developed service level agreement between the W3 group and its customers (other parts of Ford).
- Designed, coded, and implemented network monitoring software to contact beepers.
- Designed, coded, and implemented global web activity statistics system.

- Designed, coded, and maintained web security system.

Ford Motor Company 's CTIS (Corporate Technical Information System) and Information Management Department

POSIX Network Administrator, Senior Web Developer ~ 10/95 - 11/96

- Staging, maintenance, and support of 15+ POSIX based enterprise systems.
- Supported operating systems - Solaris 2.3, 2.5.1, IRIX 5.3, Linux Caldera (Redhat), FreeBSD.
Multiple Supported Machines: Sun E5000, Sun E3000, SGI INDY, SGI CHALLENGE S.
- Installed and configured multiple peripherals - CDROM, DAT drives, SSA, Exabite stacker.
- Agent technology, designed and maintained Spider for cataloging corporate network.
- Designed, Coded, Implemented, and Supported company wide web feedback system.
- Designed, Coded, Implemented the web security system for databases moved from VM.
- Member of 3 member technical subcommittee WSL (web single login) adopted by FORD MOTOR COMPANY as a solution to web security. Using cookies, SSL, cross server, cross platform.

SELECTED PUBLICATIONS, PAPERS, POSTERS & PRESENTATIONS

- *Reck, Ronald P., Sall Kenneth. Sentiment Detection in Open Source Information for the United States Government , XML-in-Practice 2008. Arlington, Virginia. December 2008.*
- *Meeting NISPOM Chapter 8 Compliance in the Linux Operating System, Information Systems Security Association. Washington D.C.. November 2008.*
- **Generating and Rendering String Frequency Measurements of Project Gutenberg Texts: Using Resource Description Framework to Present Textual Metadata**, VDM Verlag. ISBN-10: 3836494515. ISBN-13: 978-3836494519. May 2008
- *Generating and Rendering Readability Measurements of Project Gutenberg Texts*, The 4th Corpus Linguistics Conference. Birmingham, England. July 2007.
- *Applying RDF Site Syndication (RSS) and Zthes to International Standards Organization (ISO) Standards*, The 4th International Conference on Cybernetics and Information Technologies, Systems and Applications. Orlando, Florida July 2007.
- Sall, Kenneth and Reck, Ronald P. *Applying XQuery and OWL to The World Factbook, Wikipedia and Project Gutenberg*, XML 2006. Boston, MA, December 2006.
- Beckman, Tom and Reck, Ronald P. *Issues in Knowledge Representation and Semantic Interoperability*, 5th Semantic Interoperability for E-Government Conference. McLean, Virginia, October 2006. Special Recognition Award for the Best Exhibit.
- Sall, Kenneth and Reck, Ronald P. *Implementing a Government-wide Semantic Solution to Thesauri*, XML 2005. Atlanta, Georgia, November 2005.
- *Doing Justice to Data Standards: The Global Justice XML Data Model (GJXDM)*, International Conference on Politics and Information Systems Technology and Applications. Orlando, Florida, July 2005.
- John Terpstra, Paul Love, Ronald P. Reck, Tim Scanlon. **Hardening Linux**. McGraw Hill Osborne Media. ISBN: 0072254971, August 2004.