Contents

List of Tables

List of Figures

Chapter 1

Introduction

Chapter 2

Information Resources

2.1 Documents

2.2 Data

2.3 Services

2.4 Concepts

2.5 Identifiers

2.6 REST

Architectural style Stepping stone Hypermedia Content Negotiation Sub-Application Level Consistency

2.7 Scalability

2.8 Security

2.9 Versioning

Chapter 3

Linking Information Resources

Chapter 4

Wrapping Legacy Systems

4.1 D2RQ/R2RML

4.2 Resource Abstractions Over Services

4.3 Term Alignment w/ SPARQL Construct and Protocol

4.4 Near Zero Effort Data Integration

Chapter 5

Modeling Domains

5.1 RDF

5.2 RDFS

5.3 OWL

Chapter 6

Linked Data Project

6.1 History

6.2 Approach

6.3 Benefits

6.4 Linked Data Profile

Chapter 7

Data-Bearing Documents

Chapter 8

Unstructured Content

8.1 Documents

8.2 Calais

8.3 NLP

8.4 Stanbol

Chapter 9

Reasoning

Chapter 10

Semantic Search

10.1 Documents

Chapter 11

Semantic Platforms

11.1 Documents

Bibliography

H. Peter Alesso and Craig F. Smith. *Thinking on the Web: Berners-Lee, Gödel and Turing*. John Wiley & Sons, Inc., Hoboken, New Jersey, 2006.

Subbu Allamaraju. *RESTful Web Services Cookbook : Solutions for Improving Scalability and Simplicity*. O'Reilly Media, Inc., Sebastapol, California, 2010.

T. Berners-Lee, L. Masinter, and M. McCahill. Uniform Resource Locators (URL). RFC 1738 (Proposed Standard), December 1994. URL `http://www.ietf.org/rfc/rfc1738.txt`. Obsoleted by RFCs 4248, 4266, updated by RFCs 1808, 2368, 2396, 3986.

T. Berners-Lee, R. Fielding, and L. Masinter. Uniform Resource Identifier (URI): Generic Syntax. RFC 3986 (Standard), January 2005. URL `http://www.ietf.org/rfc/rfc3986.txt`.

Frederick P. Brooks, Jr. No silver bullet essence and accidents of software engineering. *Computer*, 20(4):10–19, 1987. ISSN 0018-9162. doi: http://dx.doi.org/10.1109/MC.1987.1663532.

John Seely Brown and John Duguid. *The Social Life of Information*. Harvard Business School Press, Boston, Massachusetts, 2000.

M. Duerst and M. Suignard. Internationalized Resource Identifiers (IRIs). RFC 3987 (Proposed Standard), January 2005. URL `http://www.ietf.org/rfc/rfc3987.txt`.

L. Dusseault and J. Snell. PATCH Method for HTTP. RFC 5789 (Proposed Standard), March 2010. URL `http://www.ietf.org/rfc/rfc5789.txt`.

R. Fielding, J. Gettys, J. Mogul, H. Frystyk, L. Masinter, P. Leach, and T. Berners-Lee. Hypertext Transfer Protocol – HTTP/1.1. RFC 2616 (Draft Standard), June 1999. URL `http://www.ietf.org/rfc/rfc2616.txt`. Updated by RFCs 2817, 5785.

Roy T. Fielding. *Architectural Styles and the Design of Network-based Software Architectures*. PhD thesis, University of California, Irvince, 2000.

David Gelernter. *Mirror Worlds or : The Day Software Puts the Universe in a Shoebox... How it Will Happen and What it Will Mean*. Oxford University Press, Inc., New York, New York, 1991.

John Hebeler, Matthew Fisher, Ryan Blace, and Andrew Perez-Lopez. *Semantic Web Programming*. Wiley Publishing, Inc., Indianapolis, Indiana, 2009.

Gregor Hohpe and Bobby Woolf. *Enterprise Integration Patterns : Designing, Building, and Deploying Messaging Solutions*. Pearson Education, Inc., Boston, Massachusetts, 2004.

Marshall McLuhan and Quentin Fiore. *The Medium is the Massage : An Inventory of Effects*. Bantam Books, Inc., 1967.

M. Nottingham. Web Linking. RFC 5988 (Proposed Standard), October 2010. URL `http://www.ietf.org/rfc/rfc5988.txt`.

Leonard Richardson and Sam Ruby. *RESTful Web Services*. O'Reilly Media, Inc., Sebastapol, California, 2007.

Jothy Rosenberg and David Remy. *Securing Web Services with WS-Security : Demystifying WS-Security, WS-Policy, SAML, XML Signature, and XML Encryption*. Sams Publishing, Indianapolis, Indiana, 2004.

K. Sollins and L. Masinter. Functional Requirements for Uniform Resource Names. RFC 1737 (Informational), December 1994. URL `http://www.ietf.org/rfc/rfc1737.txt`.

Jim Webber, Savas Parastatidis, and Ian Robinson. *REST in Practice : Hypermedia and Systems Architecture*. O'Reilly Media, Inc., Sebastapol, California, 2010.