

Summary

I am a software developer whose skills and interests lie at the intersection between Semantic Web and Big Data. For two years, I have worked for iNovex Information Systems on the Independent Research and Development program. I build prototype solutions that demonstrate the value of Semantic Web.

Relevant Experience

- **MatOnto Materials Science Framework** iNovex Information Systems
Software Developer 2014
 - Developed REST controllers using Groovy on Grails that orchestrated CKAN data publishing
 - Leveraged TDD workflow using JUnit to build robust software solutions midst dynamic requirements
 - Built ontologies serialized in RDF to enable federated SPARQL queries across multiple data sources
 - Managed and counseled interns who built customer facing website using Twitter Bootstrap
 - Configured and managed system infrastructure using Openstack
 - ETL'd data from HTML into RDF using "pull" based streaming XML parser
- **Hive Metadata Extractor** iNovex Information Systems
Software Developer 2013
 - Provided metadata to existing query completion and database schema facilities by extracting metadata from Hive using Java and JDBC
 - Developed Hive metadata extractor to plug into existing big data storage systems, which enabled customer's product to interface with existing data systems
- **Semantic Web Integration Prototype** iNovex Information Systems
Software Developer 2012 - 2013
 - Designed graph data system backed by Accumulo big data store to handle high volume integrated data, which led to increased data retrieval and application response time
 - Dynamically applied provenance information based on the PROV-O provenance ontology to all data headed for Accumulo, which provided lineage to all data read from Accumulo
 - Integrated structured, semi-structured, and unstructured data using W3C Semantic Web standards, which yielded inherent data layer linkages between like or similar entities from disparate data sets
 - ETL'd data from XML, RDB, CSV, and Accumulo into RDF

Education

- **Connecticut College** New London, CT
B.A. Major Computer Science, Minor Economics (GPA 3.28) Aug. 2008 - May. 2012
 - Relevant Courses: Computational Intelligence, Artificial Intelligence, Networks, Algorithms, Data Structures, Computer Organization, Topics in Software Development
- **University of Nottingham** Nottingham, UK
Study Abroad Sept. 2010 - Jan. 2011
 - Relevant Courses: Operations Research and Optimization, Knowledge Representation and Reasoning, Graphical User Interfaces, Software Engineering Methodologies, Introduction to Formal Reasoning

Skills

Languages: Experience with Java (Proficient), Ruby (Competent), Groovy (Competent), HTML/CSS (Competent), jQuery (Competent), SPARQL (Competent), Javascript (Prior Experience), Bash (Prior Experience), Python (Prior Experience) and Scheme (Prior Experience)

Certifications: Oracle Certified Associate, Java SE 7 Programmer

Misc: Experience with Openstack, JUnit, Git, Subversion, Maven, Ant, OSGI, IntelliJ IDEA, Eclipse, and Linux