Research & Projects:

Adapting the Galaxy Bioinformatics Tool to Support Semantic Web Service Composition, (Funded by NIH), August 2008-present

- Programming: Python, Mako, Pylons, JavaScript, JQuery, HTML
- Web service data mediation
- Flow mediation of service composition

WS-BioZard: A Wizard for Composing Bioinformatics Web Services, (Funded by NIH), August 2007-August 2008

- Programming: Java, Eclipse Plug-in Development, GMF/GEF/EMF, SWT
- Web service data mediation: SAWSDL (SAWSDL4j, Radiant), BPEL (NetBeans BPEL engine), OWL (OWL API, Protégé), XML, XSD (JDOM), XPath (Jaxen), XSLT

Turn your email space into web storage, Spring 2007

Implemented a C/C++ program to directly save your local file into your email space and retrieve back

Marrying Folksonomy and Ontology, Fall 2006

- Combine folksonomies and ontologies to help semantic search among tags based on ontological relationships
- Programming: Java, Applet, TouchGraph, XML, OWL (Jena), MySql, JDBC

CryptoDB (a member of ApiDB), Spring 2006

Maintain and update the ApiDB.org web site (HTML, JSP, Servlet, PHP, CGI, Struts, JDBC, Tomcat)

E-Commerce web site design and development, Fall 2005

Java, JSP, Servlet, Hibernate, Tomcat, MySql, JDBC, UML (ROSE)

SNMP network management, Fall 2002

Java, AdventNet SNMP API

Water Conservancy Information Middleware of Flood Prevention System in China, (Funded by China National 863 Program), September 2002 – July 2005

- > XML-based Data Integration (Master's thesis)
 - 1) Design and implement a system that can integrate various databases including DB2, Oracle, SQL Server, Sybase, MySQL and semi-structured file, e.g., HTML and XML
 - 2) Programming: Java, JDBC, XML, SQL, XQuery, UML, ANT
 - 3) Meta-data model design
- Enterprise Information Portal (Portlet development on JetSpeed, IBM WebSphere Portal)
- System Integration (C++ Builder, VC++.NET)
- Web Service (VS.NET)

EJB Application Server Middleware and its Supporting Environment, (Funded by China National 863 Program), September 2002 – July 2005

- > Servers studied: IBM WebSphere, JBOSS, JonAs, Tomcat, BEA WebLogic
- > Programming: JAVA, EJB, J2EE, JMS, HTML, JSP

Campus Network and Internet-based Information System, Feb. – Jun. 1998

- Campus Network Framework and Topology Design
- Development of Internet-based Information System (JAVA, Applet, HTML, ASP, ACCESS)