

## Yongjun Rong

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## EDUCATION

Jun.2006, Master of Computer Science, Texas Tech University, Lubbock, TX, USA

Feb.1996, Master of Engineering, Shanghai JiaoTong University, Shanghai, China

Jul.1991, Bachelor of Engineering, Changsha Railway University, Changsha, Hunan, China

## SKILLS:

- Cloud platform/infrastructure design and implementation and DevOps Automation (AWS, Docker, VMWare/Openstack, Linux HA, Ruby/Rails, Bash, REST, Maven, GIT, SVN, CI, SDLC, DHCP, PXE, Cobbler, MySQL/PostgreSQL, GFS2/SAN)
- Large SOA Web Services (SOAP/WSDL, REST/XML/JSON, RIA ) Enterprise Application Cloud/On-Premises Integration Service (IaaS) design, development and deployment
- Desktop and Online Accounting, CRM and ERP System Integration Architect (Java to C/C++/DLLs, COM/COM+/DCOM, .NET, WCF, SOAP/WSDL, REST)
- Server-side software development with middleware (J2EE, .NET) and DBMS
- Distributed Network System Administration (EC2, Linux/Unix/Windows, RAID, SAN, LDAP, Kerberos, NFS, DNS, LAN/VLAN, WAN, GSLB)

## HOBBIES

- Pingpong (ITTF Score around 1200)
- IoT or Robot programming (Have iRobot and MIPOSaur at home. Programming against iRobot create SDK and MIPOSaur SDK.)
- IOS/Android Apps Development (Developing a Chinese character learning App)
- Playing with cutting-edge technologies (Docker, Go, Kafka, Kubernetes and Amazon Cloudformation, JavaScript, AngularJs, ReactiveJs, Node.js)

## WORK EXPERIENCE SUMMARY:

Employments	Major Accomplishments & Technologies
Jun, 2017 – Current <b>Barclays</b> Wilmington, DE, USA <b>VP, Lead Architect Engineer</b>	<ul style="list-style-type: none"><li>• Delivery Lead for strategic distributed system technology domain</li><li>• Group-wide Cloud Adoption for Contact Center, Merchant Services and Fraud</li></ul> Microservices, CQRS, Event Store, Event Driven Architecture (EDA), Kafka/ActiveMQ/IBM MQ, Kafka Stream, SpringBoot, Docker, AWS(EC2/IAM/S3/ECS/ELB/Lambda/RDS/VPC/R53/Security/AutoScaling..etc), Kubernetes/Terraform/Puppet/Chef/Ansible, Git/Maven/Jenkins/Bamboo, Python/Ruby/Scala/Bash/Go, ELK/AppDynamic, DynamoDB/MongoDB/ElasticCache/Gridgain, Linux/Windows/AIX/Solaris, aPaaS/VMWare/Cytrix,
May, 2014 – June, 2017 <b>Oracle</b> Redwood, CA (WFH@NJ), USA <b>Lead Software Engineer</b>	<ul style="list-style-type: none"><li>• Docker Swarm/Compose/Stack CD/CI Test Environment for Cloud SDK/APIs/Connectors</li><li>• Cloud Enterprise Applications Integration(EAI) connectivity SDK/API plugin framework for Oracle SOA Suite</li><li>• Oracle Fusion Applications (FA) Business Event/Message-Driven Connector Framework</li></ul> Java, SOA, Web Services, SOAP/WSDL, REST/JSON/XML, XSchema/XSD, DOM, WSDL4J, SDK, API, MVC, Docker, Cloud, Amazon EC2, NoSQL, GIT, Maven, Junit, SoapUI, IaaS, SaaS, AWS,
Oct. 2010 – Apr. 2014 <b>Comcast T&amp;P</b> Philadelphia, PA, USA <b>Senior Cloud DevOps/Infrastructure Automation Engineer</b>	<ul style="list-style-type: none"><li>• AutoBuild System for Build/Release more than 200 microservices projects with GIT/SVN/Maven</li><li>• Configuration management and deployment automation with Puppet and Capistrano</li><li>• Continuous Integration (CI) and Continuous Deployment (CD) with Bamboo and Jenkins</li><li>• Performance Monitoring System for Jetty, JVM, Linux and Splunk</li><li>• Secured FTP server with virtual users and admins users with complex access permissions</li><li>• BOM (Bill Of Materials) Administration and Management Application (BAMA) Enhancement and maintenance</li><li>• Two Steps bare-metal Linux bootstrap system for HP Servers</li><li>• Linux HA for Git Repo(Gerrit) and Maven Repo (Artifactory/Nexus) Servers</li><li>• Automation scripts and tools for DevOps</li><li>• CoreOS and Docker prototyping and testing</li><li>• SDLC process management and junior team member training and mentoring</li></ul> DevOps, Automation, Docker, CoreOS, Ruby, Ruby on Rails 3, Bash, SDLC, GIT, Maven, Jira/Confluence, Bamboo/Jenkins/Hudson, Nexus/Artifactory, Gerrit, CI/CD, Performance Monitoring, Splunk, JMX, Capistrano, PXE/TFTP, DHCP, DNS, Cobbler, Centos, MySQL/PostgreSQL, NoSQL, Cassandra, RabbitMQ, JMS, LDAP, SSO, Metrics, Graphite, Agile, RPC, Cloud, Clustering, Linux HA, HAProxy, Pacemaker/Corrosync/Cman, SAN, GFS2, RAC, Volume Manager,

Nov. 2006 – Oct., 2010 <b>Boomi Inc.</b> Berwyn, PA, USA <b>Senior Software Engineer</b>	<ul style="list-style-type: none"> <li>• Boomi On-Demand Business Integration Cloud Service</li> <li>• Cloud Platform/Infrastructure Design and Implementation for Boomi On Demand Production Environment</li> <li>• Desktop Accounting and ERP Enterprise Applications Integration (EAI)</li> <li>• Amazon EC2 and S3 SOA HA Environment</li> <li>• Setup Development, Build and Deployment Environment for QA, Staging and Production Environment</li> <li>• Research virtualization technology and implement Virtual Machines using VMware server and workstation</li> <li>• Java to C/C++, DLL, COM/COM+/DCOM/.NET Integration</li> <li>• SaaS system integration</li> <li>• SAP system integration</li> </ul> <p>Java, SOA, IaaS, PaaS, EAI, XML, XSD, JAXB, JavaScript, .NET, EC2, S3, EBS, REST, SOAP, WSDL, SaaS, SAP, BAPI, ABAP, MySQL/PostgreSQL, Maven, SVN, JVM, JVM GC Tunning, Apache Lucene, Apache Solr, VMWare, Cloud,</p>
Jun., 2006 – Nov., 2006 <b>Vantage learning</b> Newtown, PA, USA <b>Senior System Engineer Manager</b>	<ul style="list-style-type: none"> <li>• Large scale SOA e-learning system architecture design and blueprinting</li> <li>• Large Data Center Design and Administration</li> <li>• Sun SPARCStorage SSA Array 100 and Sybase SQL Server (10.x, 11.x) Data (DB schema, data and Stored-Procedure) Recovery</li> <li>• Ecommerce Open Source Software installation and Configuration</li> <li>• Resin Application Server Distributed Session Design and Setup</li> </ul> <p>Linux, Centos, SOA, Java, .NET, Network, VLAN, Router, Firewall, Load Balancer, SOAP/WSDL, MySQL/PostgreSQL, Struts, Disk Array, Fedora, Redhat Linux, LAMP, eCommerce, SQL,</p>
May, 2002 – Jun., 22, 2006 <b>Computer Science, Texas Tech University</b> Lubbock, Texas, USA <b>Senior Programmer/Analyst and Unix System Administrator</b>	<ul style="list-style-type: none"> <li>• Unix network System and Software routine maintenance</li> <li>• Setup Veritas Netbackup System with RAID0/1/5 and Tape Library</li> <li>• Setup LDAP, Kerberos KDC and Cross-Realm system</li> <li>• Migrated email system from UNIX mail server to Windows Exchange Server</li> <li>• Secured Postfix SMTP server with SASL Authentication and Verification</li> <li>• Installed AIX 5.1 and configured NIM on IBM RS6000 (10x 7043-140 boxes and 1x 7024-E30 box)</li> <li>• Deployed Globus Toolkit3.2.1 (OGSA/OGSI) Grid Computing Environment on Solaris 9(3 boxes) and Linux (3 boxes)</li> <li>• Setup Jumpstart Environment for Solaris 9 and Solaris 10</li> <li>• Designed and Implemented the Single Sign-On (SSO) for Unix and Windows Environments</li> <li>• The Migration from NIS+ to LDAP for Solaris</li> </ul> <p>JAVA, C/C++, GCC, GNU Make, perl, LDAP, NFS, SSO, Kerberos, SSL, SMTP, Email Server and Client, Solaris, AIX, Mac OSX, Linux, Windows Server, PAM, RAID, SCSI, Veritas, TFTP, RARP/ARP, Bootparamd, DHCP, Postfix, PostgreSQL, NIS/NIS+.</p>
Aug., 2002 – Jun., 2006 <b>Computer Science, Texas Tech University</b> Lubbock, Texas, USA <b>Master Student</b>	<ul style="list-style-type: none"> <li>• Master Thesis: A Service Wrapping and Provisioning Framework for SOA</li> <li>• GIS Project: A Yield Mapping and Prediction Information Delivery System</li> <li>• Independently finished practical course projects list</li> </ul> <p>Java, C/C++, GCC, Gnu Make, Linux, Linux Kernel, GIS, Ant, Struts, J2EE, UML2, MVC, Maven, PostGIS, PostgreSQL, Solaris,</p>
Apr., 2000 – May, 2002 <b>Technology Development Center, Sun Microsystems (China) Co., Ltd.</b> Beijing, P. R. China <b>Senior Software Engineer</b>	<ul style="list-style-type: none"> <li>• Java Message Service(JMS) Prototype Application</li> <li>• Remote Learning Management Platform (www.ambow.com)</li> <li>• Bao Steel B2B Website (www.bsteel.com)</li> <li>• Project Management Tools</li> </ul> <p>Java, J2EE, JMS, EJB, Servlets, JDBC, Message-Driven Bean, LDAP, SQL, Weblogic, OOA/OD, UML, MVC, Oracle DBMS, Java IDL, RMI, CORBA, JNDI, Solaris, CVS, Ant,</p>
Aug., 1998 – Apr., 2000 <b>IBM China Research and Development Lab</b> Beijing, P. R. China <b>Software Engineer</b>	<ul style="list-style-type: none"> <li>• Credit Card Internet Online Payment System</li> <li>• Jiro/Jini-based Storage Management System</li> <li>• Handwriting Recognizing System</li> </ul> <p>Java, J2EE, C/C++, Servlets, WebSphere, SSL, JDBC, Windows NT, SAN, POS, JNI, DB2,</p>
Apr., 1996 – Jul., 1997 <b>North China Institute (Taiji Computers Corporation)</b> Beijing, P. R. China <b>System/Network/Software Engineer</b>	<ul style="list-style-type: none"> <li>• System Engineer, IBM Service Center</li> <li>• Software Engineer, HUAXU Golden Card Co. Ltd.</li> <li>• Large scale Network System Design and Administration</li> </ul> <p>C/C++, Assembly, Network Design, Router, Switch, VLAN, AIX, Disk Array, SSA, RAID, Volume Manager, IC, RIP/OSPF, Cisco IOS,</p>
Jun., 1991 – Sep., 1993 <b>Yongji Electrical and Motor Factory</b> ShanXi Province, P. R. China <b>Mechanical Engineer</b>	<ul style="list-style-type: none"> <li>• CIMS and FMS CAPP/CAD/CAM manufacturing Automation application development</li> </ul> <p>C/C++, AutoCAD, CAD/CAM/CAPP, CIMS/FMS, DOS,</p>

## SELECTED PROJECTS

### **1. Jun, 2017 – Current, VP. Lead Architect Engineer, Barclays , Wilmington, DE, USA**

Delivery lead for Distributed System technology domain which includes Microservices, Event Driven Architecture (EDA), Message transports, integration (Batch/ETL) and (Event) Stream processing technologies. Cloud Adoption to migrate on-premise enterprise systems to public cloud

#### **1.1 Delivery Lead for strategic distributed system technology domain**

Delivery lead for Distributed system technology domain which includes Microservices, Event Driven Architecture (EDA), Message transports, integration (Batch/ETL) and (Event) Stream processing technologies

##### **Technologies:**

Technology strategic Design and Stewardship, Distributed system, Domain Driven Design, Microservices, ACID/BASE, (Event) Stream /Batch Processing, Event Driven Architecture (EDA), Message Transports (Kafka, ActiveMQ, IBM MQ), Data Integration (ETL/ELT), Compensating transactions/Sagas, JMS/AMQP, Resilience and Performance, CQRS/SOA, CAP Theorem,

#### **1.2 Group-wide Cloud Adoption for Contact Center, Merchant Services and Fraud**

Cloud Assessment and consulting for cloud architecture for on-premises applications migration to AWS. Troubleshooting the cloud migration related issues

##### **Technologies:**

AWS, EC2, RDS, S3, ECS, VPC, ACL/Security Group/Routing table, ELB/NLB/ALB, Private Link, EBS,

### **2. May, 2014 – June, 2017, Lead Software Engineer, Oracle , Redwood, CA (WFH@NJ), USA**

The Cloud Connectivity software engineering team is responsible to develop the Cloud Integration Connectivity SDK and Java Connectors which enable the SOA Suite and Oracle Integration Cloud Service (ICS) connectivity to any Oracle internal or external SaaS or On-Premises Enterprise Applications.

#### **2.1 Docker Swarm/Compose/Stack CD/CI Test Environment for Cloud SDK/APIs/Connectors**

Research and prototype the docker containers, compose and swarm technologies to help developer setup complex testing services stack and improve CI testing environments for the SDK/APIs and Java Connectors.

##### **Technologies:**

Docker, Docker Machine, Docker Compose, Docker Swarm, Docker Stack, Docker CLI (Rest APIs), Weblogic, Oracle Cloud VMs, AWS, JMS, NoSQL (Cassandra), DBMS (MySQL and PostgreSQL),

#### **2.2 Cloud Enterprise Applications Integration(EAI) connectivity SDK/API plugin framework for Oracle SOA Suite**

The Cloud Integration Connectivity SDK and Java Connectors are built on the top of the Connector Architecture in the Award winning Oracle SOA Suite. It provides the plugin connectivity to any SaaS and On-Premises Enterprise Applications for the Oracle Integration Cloud Service and SOA Suite.

##### **Technologies:**

Java, SOA, SOAP/REST, WSDL/JSON, XML, XML Schema, API, SDK, IaaS, RCU, JCA, XDK, JAXP, WSDL4J, DOM, WS-Security, Jersey REST/JSON, MVC, ADF, NLS/L10, Oracle DB, Jira, Agile, ADE, GIT, Maven, Junit, XMLUnit, SoapUI, OSC, ERP, HCM, RightNow,

#### **2.3 Oracle Fusion Applications (FA) Business Event/Message-Driven Connector Framework**

The business event connector framework provides the abilities to auto-discover the FA (OSS/ERP/HCM) business events (including custom events), set event filtering conditions, subscribe to interesting business event and expose the SOAP web service as the event listener through the ICS web/JDeveloper design time UI. This event connector framework enables the Fire-and-Forget/ Asynchronous Response and Publish/Subscribe integration pattern for Business Event/Message Integration

##### **Technologies:**

Java, FA, OSC/ERP/HCM, WSDL/SOAP, REST, JSON, XSI, XML Schema, XDK, JAXP, WSDL4J, DOM, WS-Security, Jersey REST/JSON, MVC, ADF, ADE, Maven, Junit, XMLUnit, SoapUI,

### **3. Oct. 2010 – Apr. 2014, Senior Cloud DevOps/Infrastructure Automation Engineer, Comcast T&P , Philadelphia, PA, USA**

As a senior engineer in BITT(Build Integration Test Team), provided DevOps support for multiple development teams and supporting the developers for SDLC infrastructure system design/implementation, and Build/Release/Deployment/SCM/CI automation., designed, developed and implemented the AutoBuild system, OpenSource performance monitoring system for the SDLC systems, two steps bare-metal Linux bootstrap system for HP servers, Linux HA Clusters for SCM/Maven/CI/Crowd servers, Ruby/Rails software system maintenance and improvement. Managed the SCM(Gerrit/Subversion), CI(Bamboo/Jenkins) and maven repo (Nexus and Artifactory) system. Designed and developed automation scripts (bash/ruby) to improve work efficiency. Led and Trained junior team members.

#### **3.1 AutoBuild System for Build/Release more than 200 microservices projects with GIT/SVN/Maven**

Automate the branching/tagging process and improve the work efficiency from 3 days to 1 day for more than 200 projects. Using maven versions plugin and maven repo REST API to automatically detect the latest snapshot and released dependency version and update pom.xml automatically. The cut tag script can cut a bug-fixing tag for the bug-fixing patch within 5 minutes.

##### **Technologies:**

Ruby/Rails, gems, Bash, Maven, GIT, SVN, Bamboo/Jira/Confluence CLI, Nexus/Artifactory REST/XML, SDLC, CI/CD, Gerrit/Subversion, MySQL/PostgreSQL, Crowd/OpenID, Capistrano,

#### **3.2 Configuration management and deployment automation with Puppet and Capistrano**

Configuration management and deployment automation system by using puppet for linux os level configuration and capistrano for application level deployment automation

##### **Technologies:**

Puppet, Capistrano, Ruby, bash, CI/CD, GIT, Maven, Perl, Python,

### **3.3 Continious Integration (CI) and Continious Deployment (CD) with Bamboo and Jenkins**

Automation and Integration of the CI/CD clusting environments for more than 200 microservices with build/runtime dependencies using Bamboo and Jenkins

#### **Technologies:**

CI/CD, Bamboo, Jenkins, Ruby, Bash, Python, GIT, Maven, Jira/Confluence,

### **3.4 Performance Monitoring System for Jetty, JVM, Linux and Splunk**

The performance monitoring system collects JMX, splunk and OS metrics and display stats graphs for all different kinds of metrics for JVM heaps, threads and OS CPU/Disk/Memory usage and IO throughputs. Using open source projects and modify ruby/scala/java/python tools to integrate all different projects into one performance monitoring system, the system helps to detect the performance bottlenecks.

#### **Technologies:**

Metrics, graphite, jmx, splunk, Ruby, splunk-ruby-SDK, performance monitoring, UDP, Capistrano, god, bash, gdash, graphite, statsd, metricsd,

### **3.5 Secured FTP server with virtual users and admins users with complex access permissions**

Setup vsftp with virtual ftp only users and sftp servers with chrooted admin users to get complex access control for different type of users

#### **Technologies:**

ftp, sftp, chroot, bash, linux, user/group unix permission, sshd,

### **3.6 BOM (Bill Of Materials) Administration and Management Application (BAMA) Enhancement and maintenance**

Implemented with Ruby on Rails 3, Delayed\_jobs, Ruby Websocket server, mySQL as the DB server, Passangers(mod\_rails) and Apache HTTPD as LB, an internal BOM Administration and Management Application provides deployment automation and Management for more than 200 microservices for different environments (Dev/QA/Staging/Prod).The Enhancement feature enables the user to customize the list of microservices to deploy to different systems with matched Capistrano versions and BOM versions.

#### **Technologies:**

Ruby, RoR 3, Rails 3, ActiveRecord, ActionView, ActionController, ActionMailer, Websocket, linux, JSON, Capistrano,

### **3.7 Two Steps bare-metal Linux bootstrap system for HP Servers**

This system bootstrap the bare-metal HP box to automatically install and configure CentOS 6. First, it boots the HP bare-metal box to the HP-Toolkit via tftp/pxe to setup BIOS configuration, collect the mac address, add DHCP host section with static ip and add new cobbler system using customized cobbler xmlrpc bash client. Second, it boots the bare-metal box to get the static DHCP IP and tftp/pxe to the cobbler profile to install and configure CentOS 6 automatically.

#### **Technologies:**

TFTP, PXE, DHCP, DNS, cobbler, RPC, xml, bash, ILO 3, IPMI, LVM, HP Servers, CentOS 6,

### **3.8 Linux HA for Git Repo(Gerrit) and Maven Repo (Artifactory/Nexus) Servers**

The two nodes Linux HA cluster is for Git repo (Gerrit) / Maven Repo(Artifactory and Nexus) master/slave failover system. Using pacemaker/corosync/cman or keepalived/haproxy, it setup Gerrit, artifactory/Nexus master/slave automatically failover cluster with PostgreSQL/RAC and GFS2 over SAN / DRBD as backend DBMS and distributed file system.

#### **Technologies:**

Pacemaker, Corosync, Cman, Keepalived, HAProxy, GFS2, DRBD, SAN, Gerrit, Artifactory, Nexus, PostgreSQL, OpenID, LDAP, Crowd,

### **3.9 Automation scripts and tools for DevOps**

Develop and use scripts (Ruby/Bash) and tools to automate the build/release/deploy process to improve the work efficiency.

#### **Technologies:**

Ruby, Bash, Python, Capistrano, Jira/Rally, Bamboo/Confluence, Git/Gerrit, puppet, Nexus replication, REST/XML,

### **3.10 CoreOS and Docker prototyping and testing**

Using docker and CoreOS to dynamically create development and integration test environment on demand for each developer by launch a set of docker LXC with haproxy as the internal load balancer

#### **Technologies:**

CoreOS, Docker, Ruby, REST, LXC, cobbler, pxe, tftboot, DHCP,

### **3.11 SDLC process management and junior team member training and mentoring**

Design and Manage the SDLC process to build/release/deploy more than 200 projects to maven repo/CI/Integration Test environments. Maintain the maven repo servers(Nexus and artifactory clusters), CI (Bamboo), SCM (Subversion and Git/Gerrit) and clustering integration environments. Identify and troubleshooting the build/release/deploy issues. Training, guiding and mentoring junior team member.

#### **Technologies:**

SDLC, SCM, Git/Subversion, GIT Hooks, Ruby, Bash, Confluence, Jira, Agile,

## **4. Nov. 2006 – Oct., 2010, Senior Software Engineer, Boomi Inc. ,Berwyn, PA,USA**

As the market and technology leader in on-demand integration, Boomi is the industry's first and leading integration platform-as-a-service and a two-time SIIA CODiE award winner - Best Application Integration Solution (2010) and Best On-Demand Platform (2009).

### **4.1 Boomi On-Demand Business Integration Cloud Service**

A Large On-Demand integration service-oriented (SOA) system helps to visually design the business integration process using Rich Internet Application (RIA), automatically deploy to distributed run-time engines based on REST/XML style. The run-time engine named "atom" contains all the components required to execute an integration process from end-to-end including connectors, transformation rules, decision handling and processing logic. The software is delivered as a SaaS system based on web 2.0 technologies with zero installation and zero coding.

**Technologies:**

Java, XML, XSD, JAXB, REST, HTTP, Hibernate, openlaszlo, SSL, PKI, com4j, .NET 3.0/2.0/1.1, COM/DCOM, Linux, QXML, eConnect, servlet, Jetty, IDEA, Maven, subversion, Confluence, Jira, MySQL, RAID, SQL server, QuickBooks 2005, Sage MAS 90/200/500, MS Dynamics GP 9.0/10.0 /2010, SOA,

#### **4.2 Cloud Platform/Infrastructure Design and Implementation for Boomi On Demand Production Environment**

Distributed clustering production environment with ten 64-bits Redhat Enterprise Linux servers, Clustering MySQL DB servers, SAN and NFS is hosted in Rackspace and OpSource.

**Technologies:**

64-bits Redhat Enterprise Linux, MySQL clustering, Apache, PHP, Jetty, 64 bits Java, Apache Lucene/ Solr, Openlaszlo, distributed cache, distributed and parallel algorithm, ehcache, comet, continuation, DWR, JVM tuning, jmap, jstat, Sun JVM Heap, GC, vmstat,

#### **4.3 Desktop Accounting and ERP Enterprise Applications Integration (EAI)**

Solutions integrating with some popular desktop accounting software (QuickBooks, MS Dynamics Great Plains, Sage Peachtree and Sage Simply Accounting,), and ERP(SAP, Oracle e-Business, PeopleSoft, JD Edwards and Siebel, MS Dynamics Navision, MS Dynamics CRM On-premise 4.0 and online) are developed to import and export business data using their related popular SDKs and APIs.

**Technologies:**

QXML RequestProcessor, Microsoft eConnect 9.x/10.x/11, Librados, SAP R3, BAPI, REST/XML, COM/COM+/DCOM, .NET, MS Dynamics Navision, MS Dynamics CRM, SOAP/WSDL, WCF, XMLPort, C/AL, CodeUnits,

#### **4.4 Amazon EC2 and S3 SOA HA Environment**

Three EC2 instances including two web instances as a cluster and one DB ( MySQL 5.x) instance, which is installed and configured with Apache open source search server solr and Apache httpd load balancer, are configured in Amazon web service virtual environment.

**Technologies:**

Fedora 6//7/8, AWS, EC2, S3, Jetty 6.x/7.x, MySQL 5.x, Apache httpd 2.x and Solr 1.3.x/1.4.x, NFS, shell script(bash and sh), ehCache, cron,

#### **4.5 Setup Development, Build and Deployment Environment for QA, Staging and Production Environment**

Setup java, maven, subversion development, TeamCity build environment and Apache ant release xml, shell scripts and PHP scripts to maintain the user accounts.

**Technologies:**

Maven 2.x, subversion, TeamCity, PHP 5.x, Apache Http server 2.3, Apache Ant, MySQL5.x, Jetty 6.x, Openlaszlo 3.4, Apache Solr, Fedora 8,

#### **4.6 Research virtualization technology and implement Virtual Machines using VMware server and workstation**

Researching and comparing current popular virtualization and paravirtualization technologies like VMware, Xen, Microsoft Virtual PC and implementing Virtualization Environments using VMware Workstation 6.x and Server 1.x. Performance diagnostics and tuning in Linux and VMware Environment.

**Technologies:**

Virtualization, paravirtualization, VMware Workstation 6.2 and VMware Server 1.4, Xen, Microsoft Virtual PC, Fedora 8, RAID, SMP, Performance tuning, Subversion, Maven, PHP, MySQL,

#### **4.7 Java to C/C++, DLL, COM/COM+/DCOM/.NET Integration**

Using JNI, JNA, Com4j, ikvm, java application can be seamlessly integrated with c/c++ win32 DLLs, COM/COM+/DCOM Objects and .NET assemblies.

**Technologies:**

Java, .NET 3.0/2.0/1.1, COM/DCOM, Com4j, iKVM, C#, VB.NET, JNI, JNA, Win32 DLL, COMAdmin,

#### **4.8 SaaS system integration**

Design, development and implement integration solutions for SaaS systems (Parature, AutoTask and Zuora) based on REST/XML and web services (SOAP/WSDL) technologies.

**Technologies:**

REST/XML, SOAP/WSDL, namespace, DOM, soapUI,

#### **4.9 SAP system integration**

Integrate with SAP NetWeaver and SAP R3 ECC 6.x via web services and librados (sapjco)

**Technologies:**

SAP R3, NetWeaver, Web Services, SOAP, WSDL, wsdl4j, SAP-JCO, RFC, BAPI, ABAP, Java,

### **5. Jun., 2006 – Nov.,2006, Senior System Engineer Manager, Vantage learning , Newtown, PA,USA**

As the leader in cost-effective, high volume, secure, scalable online assessment and instructional programs for K-12 and higher education, Vantage Learning leverage technology such as artificial intelligence, natural language understanding, and web-based learning objects. Vantage Learning has received accolades ranging from the prestigious CODIE Award for best instructional technology.

#### **5.1 Large scale SOA e-learning system architecture design and blueprinting**

Designed and blueprinted large scale SOA e-learning system based on Java/.NET with PostgreSQL and MySQL DB clusters

**Technologies:**

SOA, E-Learning, Struts, J2EE, .NET 2.0/3.0, Resin, SOAP, WSDL, UDDI, XML, PostgreSQL, MySQL,

## **5.2 Large Data Center Design and Administration**

More than 100 Unix/Linux/Windows server machines and enterprise network devices (three sets of BIP load balancers, switch and routers) data center with more 30 mission-critical applications serving millions of Internet connections.

### **Technologies:**

Solaris 5,7, Linux(Redhat,Fedora), F5 Big-IP load balancers, Switch, Router, VLAN, UPS, RAID 1,0,5, Windows Server, Terminal server, VNC, SPARCStorage, Tape Drive, Veritas, Apache, Resin, PostgreSQL,

## **5.3 Sun SPARCStorage SSA Array 100 and Sybase SQL Server (10.x, 11.x) Data (DB schema, data and Stored-Procedure) Recovery**

Recovered important patent data and technologies from an old dead Sun SPARCStorage SSA Array with Sybase Server

### **Technologies:**

Solaris 5,7, Linux(Redhat, Fedora), Sybase SQL Server 10.x, Sybase ASE 11.x, 12,x 15.x, SSH, SPARCStorage SSA Array 100, Tape Drive,

## **5.4 Ecommerce Open Source Software installation and Configuration**

Installed and Configured the osCommerce with the x-cart and Sales-n-Stats modules in PHP and MySQL environment

### **Technologies:**

Linux(Redhat, Fedora), PHP5.x, MySQL 5.x, Apache 2.x,

## **5.5 Resin Application Server Distributed Session Design and Setup**

Installed and Configured Resin Application Server with distributed session and http load balancer

### **Technologies:**

Linux(Redhat, Fedora), resin 3.0, Java, Servlet, distributed session, cluster, load balancer (software and hardware),

## **6. May, 2002 – Jun.,22,2006, Senior Programmer/Analyst and Unix System Administrator, Computer Science, Texas Tech University , Lubbock, Texas,USA**

System Administrator for networked Unix(Solaris, AIX, Mac OSX and Linux) and windows servers with SSO for Kerberos and LDAP, Veritas Netbackup for Disk Array with RAID 0/1/5, Migration from NIS/NIS+ to LDAP and Postfix/Sendmail configuration for the research and teaching lab for computer science department.

### **6.1 Unix network System and Software routine maintenance**

Daily maintenance and system administration for networking Solaris, AIX and Mac OSX

#### **Technologies:**

Solaris 8,9,10, Linux, AIX, NFS, NIS/NIS+, LDAP, SMTP, IMAP, POP3, WebMail, SSH, Samba, Kerberos, Netgroup, Jumpstart, User Accounts, Quota, License server, GNU Make, GCC, Java, RAID, Tape Library, Veritas, Apache, MySQL, Sun Ray Server, PAM, Security, Syslog,

### **6.2 Setup Veritas Netbackup System with RAID0/1/5 and Tape Library**

Setup,Administration and Backup for large Disk Array (RAID 0/1/5) Storage and virtual File system with Volume Manager

#### **Technologies:**

Veritas NetBackup Enterprise Server 5.1, Veritas NetBackup Client, RAID 0,1,5, SCSI, Volume Manager, VFS, Tape Library,

### **6.3 Setup LDAP, Kerberos KDC and Cross-Realm system**

Designed and Implemented the Single Sign On (SSO) with setup LDAP server, Kerberos KDC and Cross-Real Sytem authentication

#### **Technologies:**

SASL-2.1, GSSAPI, SEAM 1.2, SunOne Directory Server 5.2, NIS+, LDAP V3, PAM, Solaris 9, Windows Server 2003, Active Directory,

### **6.4 Migrated email system from UNIX mail server to Windows Exchange Server**

Setup, Administration for SMTP servers in Solaris and Windows and Configured all different kinds of email clients for all different systems with POP3/IMAP with SSL authentication

#### **Technologies:**

Sendmail, Postfix, Unix Mail Client, Outlook, Solaris 9, Linux, Windows Server, Exchange Server, IMAP/S, POP3/S, SSL,

### **6.5 Secured Postfix SMTP server with SASL Authentication and Verification**

Setup and configured Postfix SMTP server with SASL Authentication and Verification

#### **Technologies:**

Openssl-0.9.7, SASL-2.1, Postfix 2.4, SquirrelMail, pine, Solaris 9, Linux,

### **6.6 Installed AIX 5.1 and configured NIM on IBM RS6000 (10x 7043-140 boxes and 1x 7024-E30 box)**

Setup and configured IBM AIX for RS6000 with NIM and NFS server

#### **Technologies:**

AIX 5.1, NIM, NFS, NIS/NIS+, SORCER/Jini/Rio,

### **6.7 Deployed Globus Toolkit3.2.1 (OGSA/OGSI) Grid Computing Environment on Solaris 9(3 boxes) and Linux (3 boxes)**

Setup and Configured Globus Toolkit Grid Computing Environment with SSL certificates

#### **Technologies:**

Unix ( Solaris 9, Redhat Linux 9), NFS, NIS/NIS+, Perl, PKI, X509, GNU Tools, Globus Toolkit 3.2.1, OGSA/OGSI, GSI,

## **6.8 Setup Jumpstart Environment for Solaris 9 and Solaris 10**

Designed and Implemented the Jumpstart Environment with one installation server, one profile server and two boot servers for two different IP subnets to install and configure network, NIS+, NFS for more than 50 Sun client boxes. Developed Perl scripts to maintain NIS+ tables and tftp boot parameters

### **Technologies:**

Unix( Solaris 9), Jumpstart, TFTP, Bootparamd, NIS+, Perl, Security, snoop, RARP/ARP,

## **6.9 Designed and Implemented the Single Sign-On (SSO) for Unix and Windows Environments**

Integrate the UNIX and Windows environment in a Single sign-on environment using LDAP, Kerberos, AFS, Samba technologies

### **Technologies:**

Unix( Debian Linux, Solaris 8 and 9), LDAP(OpenLDAP2.1.2, SunONE Directory Server 5.2 , MS Active Directory), AFS (OpenAFS 1.2.10), Kerberos (SEAM 1.2, MIT Kerberos V 1.3.1). PAM, GSSAPI, SSL, SASL, SSH, C++, GNU make, GCC, Visual.NET, Perl,

## **6.10 The Migration from NIS+ to LDAP for Solaris**

Migrated the NIS+ services in Solaris 8 to LDAP (iPlanet Directory Server 5.1.) in Solaris 9. Installed, configured and implemented the test environment and designed LDAP schema to satisfy department's requirements in the directory services. Developed Perl scripts running on Solaris 9 to fulfill user managements.

### **Technologies:**

Unix(Solaris 8 and 9), LDAP( SunONE Directory Server 5.1 ), Kerberos (SEAM 1.2). NIS/NIS+, SSL, SSH, Perl, GNU make , GCC,

## **7. Aug.,2002 – Jun.,2006, Master Student, Computer Science, Texas Tech University ,Lubbock, Texas,USA**

Studied as Master Student in the CS department while working as part time as System Administration for the Teaching and Research labs for Unix/Linux and Windows environments

### **7.1 Master Thesis: A Service Wrapping and Provisioning Framework for SOA**

Based on Jini/Rio technologies, this framework automatically generates the service wrapper codes (service dynamic smart proxy, bean wrapper and provisioning descriptions in xml format ...etc.) for legacy code and autonomic provision it as a service provider (JSB - Jini Service Bean) into SOA grid environment. A GIS based Yield Tracker system (developed in Basic language) is wrapped as service provider and provisioned into multiple Rio cyber nodes.

### **Technologies:**

Jini 2.0, RIO, JERI, Globus Toolkits 3.x, J2EE, Web Service, OpenGIS, PostGIS, JDBC, GeoServer, Struts, Ant, Tomcat, Servlet, JSP, UML2,

### **7.2 GIS Project: A Yield Mapping and Prediction Information Delivery System**

By using a OpenGIS project Geoserver and GIS DBMS ( PostgreSQL/ PostGIS) , the system displays a real web GIS map to the farmer. The farmer selects a particular field and other related planting information (planting date, irrigation or not, crop type) from the web map. The system uses an agriculture model (developed in Basic Language) and other information collected from satellites system in real-time to dynamically generate a web GIS based yield prediction map.

### **Technologies:**

OpenGIS, PostGIS, PostgreSQL, JDBC, GeoServer, GeoTools, Struts, Ant, Apache Maven, Servlet, JSP, MVC,

### **7.3 Independently finished practical course projects list**

### **Technologies:**

GCC Compiler, Solaris, Linux Kernel 2.4, UML 2, Rational Rose, Java, SORCER, SOA, Jini, JavaSpace, JBoss, J2EE, VFS, Java Card platform, MIDP, MIDlets, Servlets, OCF, CLDC, Ant,

## **8. Apr., 2000 – May, 2002, Senior Software Engineer, Technology Development Center, Sun Microsystem (China) Co.,Ltd. , Beijing, P. R. China**

As Senior software engineer, provided consulting services for Java/J2EE technologies for local companies. Helped design and architecture the Java/J2EE systems around Sun's software products like iPlanet Application Server, Directory Server, Message Queue Server

### **8.1 Java Message Service(JMS) Prototype Application**

The prototype proves the idea of using JMS to develop a software system to implement tax documents approval process in Tax Bureau of China. Two computer nodes were deployed to emulate city node and province/state node. Each node includes JSPs as input interface to human user, Servlets as messages sender to JMS message queue, Message-Driven Beans (MDBs) act as JMS message listener to message queue and also include JDBC connectors to local DBMS. This prototype fulfills a typical JMS system which includes the message queue server and application server and DBMS.

### **Technologies:**

iPlanet Application 6.0, iPlanet Directory Server, iPlanet Message Queue Server, Oracle 8.x, Solaris, JSP, Servlet, EJB, JDBC, JNDI, LDAP, SQL, JMS, Message-Driven Bean, JMS, J2EE,

### **8.2 Remote Learning Management Platform (www.ambow.com)**

Based on J2EE technology, an e-learning platform includes course management, certificate management, and platform management subsystems as well as other useful utilities. The development of the platform was followed the RUP engineering process. UML, object-oriented analysis (OOA) and object-oriented design (OOD) technologies were used during the whole modeling process.

### **Technologies:**

Weblogic 6.0, Oracle 8.x, Windows 2000, Solaris, Rational Rose 2000, Microsoft Visual SourceSafe 6.0, JSP, Servlet, EJB, JDBC, JNDI, LDAP, SQL, Security, UML, OOA, OOD, MVC,

### **8.3 Bao Steel B2B Website (www.bsteel.com)**

Based on the blueprint of the J2EE's sample program (Pet store) which implemented the MVC pattern, the first large-scale B2B website in China consists of more than ten modules such as User Manager, DB Manager, Auction, Products, Ordering, Bargaining, Communication, etc. and more than 100 tables.

**Technologies:**

iPlanet Application Server 6.0, iPlanet Directory Server 4.1, iPlanet Web Server 4.1, Oracle 8.1.5, Solaris 2.7, Window NT 4.0-Sp6, Jakarta Ant 1.1, CVS, JSP, Servlets, EJB, JDBC, JNDI, LDAP, SQL, Security,

#### **8.4 Project Management Tools**

Run on iPlanet Application Server (iAS) 6.0 platform, the tools provide the web-based functionalities such as project management, user management, document management and resources management. The user management module is LDAP-based authentication and session-based authorization. A CORBA (JavaIDL) server provides the SCC and file accessing in local machine for EJBs (CORBA client) in iAS6.0. These tools include 30 Servlets, 20 JSPs, 10 EJBs and some other helper classes

**Technologies:**

iPlanet Application Server 6.0, iPlanet Directory Server 4.1, iPlanet Web Server 4.1, Oracle 8.1.5, Solaris 2.7, JSP, Servlet, EJB, JDBC, Java IDL, CORBA, JNDI, LDAP, SQL, Security,

#### **9. Aug.,1998 – Apr.,2000, Software Engineer, IBM China Research and Development Lab , Beijing,P. R. China**

As software engineer, designed and implemented Java/J2EE systems around IBM software products like IBM WebSphere ...etc.

##### **9.1 Credit Card Internet Online Payment System**

Based on the existing POS payment system supported by ICBC(Industrial and Commercial Bank of China), a credit card online payment system was developed and deployed using IBM Payment Server, Net.Commerce (previous version of IBM WebSphere Commerce Suite), WebSphere Application server. Payment Server connected to ICBC POS front server via encrypted communication by using a serial (COM port) interface software module which emulates the typical POS credit card operation for the internet online user.

**Technologies:**

WebSphere Application Server, Net.Commerce, Payment Server, DB2, WinNT Server, JSP, Servlet, Security, SSL, JDBC, C, Socket and Serial Communication Programming, javax.comm, SDLC,

##### **9.2 Jiro/Jini-based Storage Management System**

Based on Jiro/Jini technology, developed a distributed management system for SAN.

**Technologies:**

Apache1.3, JDK1.2.x, Solaris 2.7, JSP, Servlet, Jiro/jini, RMI, SAN,

##### **9.3 Handwriting Recognizing System**

Using Java JNI, MFC, Lotus Domino, LS:DO, RDO:ODBC and DB2, developed a handwriting recognition testing, research environment for IBM ThinkScribe. It includes a web-based client (servlets communicate with ThinkScribe Driver via JNI), DB accessing (LS:DO and RDO:ODBC) and stand-alone application client (MFC)

**Technologies:**

Lotus Domino R5, Visual Basic 6.0, DB2, WinNT-sp5, Lotus Notes, MS-IE, JSP, Servlet, Lotus Script, LS:DO, RDO:ODBC, Visual Basic, MFC,

#### **10. Apr.,1996 – Jul.,1997, System/Network/Software Engineer, North China Institute (Taiji Computers Corporation) , Beijing,P. R. China**

Worked for different teams as System/Network/Software Engineer. Provided production supporting services for IBM RS6000 and Disk Array products. Developed IC Card Application system. Designed Large scale network system with Cisco Routers and Switches.

##### **10.1 System Engineer,IBM Service Center**

This service center is the joint department of IBM and Taiji Computers Company. It provides professional technical supports for IBM RS6000 and IBM Disk Array Products.

**Technologies:**

IBM RS6000 (SP2, R50, ..., 43P), AIX, IBM Disk Array, AIX, TCP/IP, HACMP, RAID0,1,5, SCSI, JFS, SSA, Volume Manager, Logical/Physical Partition,

##### **10.2 Software Engineer, HUAXU Golden Card Co.Ltd.**

Developed IC (Integrated Circuit) Card related hardware and IC Card application system

**Technologies:**

ATMEL Chips, Motorola, Memory/Security/CPU Card. M51 (Single Chip Computer). Visual C++, Visual Basic, Borland C++, Power Builder, Windows NT, C++, DLL, Lib, COS (Chip OS), DES, Assembly Language, FoxPro,

##### **10.3 Large scale Network System Design and Administration**

Designed large-scale network system plan and implemented the network system (hardware installation, Data link layer and IP layer configuration) with fiber network products (Cisco, IBM ATM and 3Com)

**Technologies:**

IBM 8265/8285/8274, Cisco Router 7500, Cisco 2511, ATM, ELAN, VLAN, HFC, RIP, OSPF, Cisco IOS, X.25, Frame-Relay, ISDN, Ethernet,

#### **11. Jun., 1991 – Sep.,1993, Mechanical Engineer, Yongji Electrical and Motor Factory , ShanXi Province,P. R. China**

Designed Locomotive engine electric motor/generator cases and automated with AutoCAD, CAPP and CAM with FMS/CIMS

##### **11.1 CIMS and FMS CAPP/CAD/CAM manufacturing Automation application development**



Locomotive's motor and generator related mechanical products design and manufacturing processing. Programming on FMS/CIM manufacture centers from GE (General Electric)

**Technologies:**

AutoCAD, C, C++, DOS, Z80(Single Chip Computer), Borland C++,

## **HOBBIES PROJECTS:**

### **H.1 Personalized JSON Schema Resume**

Customized the open source project dynamic-json-resume using JSON format and mustache templates with Node.js and CSS3. github url: <https://github.com/rongyj/dynamic-json-resume/tree/rongyj>

**Technologies:**

JavaScript, HTML5, CSS3, Node.js, JSON, mustache,