

Yaodan Zhang

Senior Consultant

ydzhang@thoughtworks.com
(86) 133-4898-3562

Profile

Yaodan joined ThoughtWorks as a graduate in April 2013 and serves as a Developer and Consultant since then. His main area of recent expertise has been Java backend application architecture and development.

At the same time, Yaodan is an active participant in the Chinese developer community, with dozens of articles published. He has translated a technical book into Chinese recently, which is "Re-Engineering Legacy Software".

Skills

- **Java/JVM Specific Competencies:**
lightweight J2EE architecture and development, REST architecture style, Spring, Spring Boot, JUnit, JMS, jBehave, Selenium, Groovy, Spock, Gradle, Gatling, Jetty, Tomcat, Redis, Oracle, DB2, MySQL
- **Cloud/Infrastructure Automation:**
AWS, Ansible, Docker, Python
- **Machine Learning & AI:**
Chatbot, AWS AI toolkit, Google AI toolkit, Deep Learning networks (incl. CNN, RNN, etc.), Tensorflow.
- **Front-end Specific Competencies:**
HTML, CSS, JavaScript, Jasmine
- **Methodologies:**
XP-like agile methods.

ThoughtWorks Experience

- **Client: Suncorp - TDL - Customer Assets**
Brisbane, Australia / Chengdu, China Jul 2013 - now

This engagement was to help the client to accomplish the technical architecture transformation. Suncorp owned more than 20 brands include both Insurance and Banking. Suncorp Customer Data team maintained two Customer Master Data Management (MDM) systems and a couple front-end applications used by the call center, which need to aggregate all the customer information from different source systems and integrate with them to provide real-time services. Most of the assets were legacy monolithic systems and integrated with ESB.

A 9-ThoughtWorkers team (5 pods) is now working with the client team, building microservices to replace ESB, building new Customer MDM and maintaining the legacy MDMs. As the tech lead, Yaodan got involved with the following key assets and projects.

1. Customer MDM:

IBM Infosphere MDM product is purchased to replace the two legacy Customer MDM in Suncorp. The team is implementing it and building RESTful APIs acting upon it to provide real-time services.

Challenge: As it is a monolithic application, the installation/configuration/deployment of IBM MDM is hard to be done and a lot of manual effort is required.

Accomplished: Yaodan led the infrastructure stream and automated the whole process of product installation/upgrade, application server configuration, customization extension deployment.

2. Customer domain APIs:

A couple of Spring Boot based RESTful APIs are built and owned by the team, providing services of Customer, Marketing Consent, Customer Data Scrubbing, etc..

Challenge: The existing integration was built based on Enterprise Message Bus. It was a monolithic application owned by a delegated team and became a single point of failure.

Accomplished: Yaodan led the architecture migration from ESB to microservices, and development of the various RESTful APIs.

3. Legacy MDM - GCIS (Global Customer Information System):

GCIS is a transactional customer repository that provides real-time customer services.

Challenge: It was a 15 years old legacy system which was built on legacy tech stacks such as COBOL and EJB. There were no automation tests when TW joined the team and new features were hard to be introduced.

Accomplished: As the tech lead, Yaodan led the improvement and simplification of this system. Include: improving functional tests, introducing Groovy and Spock as unit test framework to increase test coverage, and simplifying codebase on a daily basis.

4. Legacy MDM - CDI Hub (Customer Data Integration Hub)

CDI Hub is an analytical customer repository that aggregates the customer & product data from all the source systems within Suncorp. This is a batch application based on IBM Initiate.

Challenge: It needs to transform the data model from all the different source systems into a single one. The performance of CDI Hub is not good enough and there are a lot of production incidents.

Accomplished: As the tech lead, Yaodan led the performance improvement and reducing production incidents.

- **ThoughtWorks University**

Bangalore, India Jun 2013 - Jul 2013

Yaodan attended the 31st ThoughtWorks University at Bangalore, for ThoughtWorks Immersion training. Combining classroom and lab sessions with practical project experience, the 6-week course covered both the “big picture” of agile methodologies and some hands-on Java development experience.

- **Client: Suncorp Digital**

Sydney, Australia / Chengdu, China Apr 2013 - Jun 2013

As part of a 4-ThoughtWorkers team, Yaodan worked closely with client developers to build an online application to sale Suncorp Home Insurance. This application had a lightweight 3-tiered architecture based on J2EE and was directly integrated with Suncorp product system using a web services platform. A valued member of the team, Yaodan helped taking the system through its second major production release and took a lead role in introducing marketing data collection and identification tool, using SiteCat.

The team used best-of-breed tools, such as JUnit, Selenium, and Concordion to build the application on top of a Spring/Hibernate base set of technologies helped ensure the project's success.

Publications

Yaodan has translated the following book into Chinese:

- Re-Engineering Legacy Software, Chris Birchall, Manning, 2016

Education

Master of Engineering

Huazhong University of Science and Technology **2009 - 2013**

Bachelor of Engineering

Huazhong University of Science and Technology **2005 - 2009**