

# Chao (Richard) Yang

SOFTWARE ENGINEER · FULL STACK DEVELOPER · JAVA/ANDROID DEVELOPER

2014 Bucklands Beach, Auckland, New Zealand

☎ (+64) 027-553-2688 | ✉ richd.yang@gmail.com | 🏠 yangchao.me | 🌐 richdyang | 🌐 richdyang

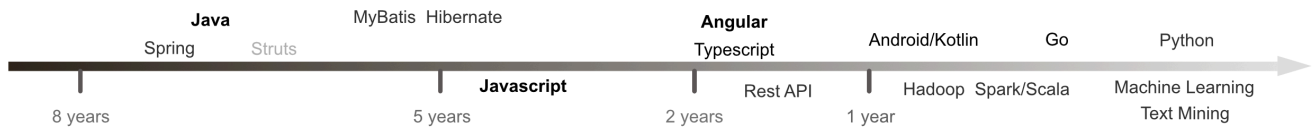
## Summary

- 8+ years hands-on experience specializing in Java-based backend, web development. Technology enthusiast interested in devising a better problem-solving method for challenging tasks, and open to learn emerging technologies and tools.

- Seeking a new role in Web/Mobile application development, backend or front-end.

## Technical Skills

<b>Java stack</b>	Core Java, J2EE, Servlet, JSP/JSTL, SQL, JPA, SOAP Web Services, RESTful API/Services Spring (Core, Web MVC, Data), Hibernate, MyBatis (iBatis), Struts2
<b>Web</b>	HTML, CSS, JavaScript/ES6, JSON, AJAX, SCSS, Bootstrap Angular2+, jQuery, Typescript, Webpack, NodeJS, Express, ReactJS, MobX
<b>OS &amp; Server</b>	Linux (Debian/Ubuntu, RHEL), basic shell skills WebSphere, Tomcat, Nginx, DB2 9.7, PostgreSQL, Oracle, MongoDB, Redis
<b>Tools</b>	JUnit, Mockito, SoapUI, Maven, Gradle, Jenkins, Git
<b>Process</b>	Agile methods, Scrum, Waterfall Model
<b>Programming</b>	Python, Kotlin, Go language
<b>Others</b>	Android development, Hadoop MapReduce, Spark



## Recent Research/Side Projects

### Pattern Detection and Analysis for Police Incident Reports

*In Progress*

WAIKATO UNIVERSITY & NZ POLICE

A Research Project to investigate ways to analyse and identify trends in police incident reports by experimenting with some text mining and natural language processing techniques using real world datasets.

<All source code can be found on Github>

- Weta** A visual workflow environment for text analytics integrated with Spark ML and other NLP, text mining libraries
- Jago** a simplified JVM implementation following JVM specification in Go programming language
- wenjiuba.com** a production web application built with Angular 4.0, Typescript, Webpack and Spring MVC for Rest API

## Work Experience

### 3D Printing Systems

*Auckland, New Zealand*

FULLSTACK DEVELOPER

*Oct. 2017 - Now*

RESPONSIBILITIES:

- Design a robot position tracking system on Android to estimate the real-time pose utilising Computer Vision technology.
- Build visual programming environment for K12 education by Blockly and IoT techniques.
- Gamify the swam robots collaboration using Unity 3D WebGL engine.

TECHNOLOGIES USED

Android, OpenCV, NodeJS, Express, ReactJS, MobX, Blockly, MongoDB, Webpack, MQTT, SVG

### Blackboard

*Shanghai, China*

SENIOR SOFTWARE ENGINEER

*Oct. 2015 - Jan.2017*

Blackboard, a leading provider of education technology solutions. Learn™ system is widely used in universities all over the world.

#### RESPONSIBILITIES:

- Focused on the development and maintenance of Blackboard flagship product Learn Classic and SaaS.
- Worked in a Scrum team collaborating with other members, support other teams for performance or security vulnerable issues.
- Analysed reported issues, replicated problems in local environments, fixed defects and seek workarounds to support our clients.
- Developed new features for the next generation product utilizing Spring MVC, AngularJS and front-end workflow, mainly focusing on backend Rest APIs and tests.

#### KEY ACHIEVEMENTS:

- Fixed far more than average numbers of defects with high quality on Learn 9.1 classic during two sprints just after on board, and was recommended as the “star employee”.
- Implemented these modules/building blocks: discussion board, group assignment, Collaborate video conference integration.
- Load test on different cloud file systems (Amazon EFS, GlusterFS). Application performance tuning using New Relic and JProfiler.

#### TECHNOLOGIES USED

Java, Spring MVC, PostgreSQL, AngularJS, Typescript, Grunt

### **Bank of Communications**

#### SOFTWARE ENGINEER / SYSTEM ANALYST

Bank of Communications is a commercial bank as a leading financial service provider in China.

*Shanghai, China*

*Apr. 2008 - Jul. 2015*

#### RESPONSIBILITIES:

- Produced detailed design documents with design alternatives, pros and cons of each approach, architecture design decisions, technologies or vendor assessments and reasons for the recommended technical solution.
- Reviewed code and got developers concerned about good design and maintainability issues, refactored the source code by using design principles and key design patterns.
- Interfaced between business users and development teams, UI & UX design teams, testing teams on critical divergences and trade-offs between requirements and implementations.
- Lead a 5 members scrum team, assigned responsibilities, elaborated user cases, managed project schedules and module scopes.

#### KEY ACHIEVEMENTS:

- Initiated and developed a hybrid mobile office system for our customer managers, which increased workplace productivity and facilitated customer managers to perform business on the go.
- Built a distributed web scraping system to aggregate the information from online social media, stock exchange, and government websites by using NoSQL databases like Redis, MongoDB and applying Greenplum’s in-database machine learning algorithms for data analysis.
- Introduced agile development training programs and applied this methodology to a project for Loan management system, which shortened the time of development and testing, deployment 1.5 months ahead of the planned deadline.
- Built a J2EE based Loan management system using popular frameworks like Spring, Struts, MyBatis, Apache Axis2, Adobe Flex, Maven and Jenkins CI by applying OO design concepts, design patterns, and best practices.

#### TECHNOLOGIES USED

Java, Spring MVC, MyBatis, Axis2, DB2, Adobe Flex, jQuery, WebSphere, MQ, ESB. Python, Redis, MongoDB

## **Education**

---

### **University of Waikato**

MASTER OF INFORMATION TECHNOLOGY

*Hamilton, New Zealand*

*Feb. 2017 - Feb. 2018*

### **Shanghai Jiao Tong University**

M.S. IN PATTERN RECOGNITION & INTELLIGENT SYSTEMS

*Shanghai, China*

*Sep. 2005 - Apr. 2008*

### **Xi'an Jiao Tong University**

B.S. IN INFORMATION ENGINEERING

*Xi'an, China*

*Sep. 2001 - Jul. 2005*

## **Referees**

---

- Dr. Shaoqun Wu / shaoqun.wu@waikato.ac.nz

Other lecturers, colleagues available upon request