

# Chao Yang

SOFTWARE ENGINEER · FULL STACK DEVELOPER · JAVA/ANDROID DEVELOPER

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## Summary

- 8+ years hands-on experience specialising in Java-based backend web application development.
- Full stack developer comfortable with multiple technology stacks: JavaEE/Spring stack, MEAN stack, modern front-end workflow.
- Technology enthusiast interested in devising a better problem-solving method for challenging tasks, and open to learning emerging technologies and tools.
- Seeking a new role in Web/Mobile application development, backend or front-end.

## Technical Skills

<b>Java</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>Lifecycle process</b>	Agile methods, Scrum, Waterfall Model
<b>Programming</b>	Python, Go language
<b>Others</b>	Android development, Hadoop MapReduce, Spark

## Recent Projects on GitHub

### Pattern Detection and Analysis for Police Incident Reports

Waikato University & Waikato  
Police

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

<b>Weiv</b>	a pragmatic front-end view library for modern component-oriented development applying Virtual DOM, MobX and template rendering
<b>Jago</b>	a simplified JVM implementation following JVM specification written in Go programming language
<b>Weta</b>	a visual workflow environment for text analytics integrated with Spark ML and other NLP, text mining libraries
<b>wenjiuba.com</b>	a production web application built with Angular 4.0, Typescript, Webpack and Spring Boot / MVC powering REST APIs

## Work Experience

### 3D Printing Systems

Auckland, New Zealand

FULLSTACK DEVELOPER

Oct. 2017 - Now

#### RESPONSIBILITIES:

- Design a robot positioning Android App to estimate real-time poses utilising Computer Vision technology.
- Build visual programming environment for K12 education by Blockly and IoT techniques, including over 40 customised blocks to control robots.
- Develop a virtual Map on page to show robot positions and motion in a real-time way and a dashboard to visualise data from multiple sources
- Build front-end UI using ReactJS, MobX for application state management and a code execution sandbox using Web Worker and JSInterpreter
- Develop backend REST APIs powered by NodeJS, Express and MongoDB.

#### KEY ACHIEVEMENTS

- Push the product into Beta release 3 months ahead the planned deadline.
- Refactor the existing solution architecture and greatly simplify dependent external technologies.
- Solved some key technical issues: code execution sandbox, positioning system.

## TECHNOLOGIES USED

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

## LIVE DEMO

<http://app.kaisclan.ai> (ask me for login account if required)

## 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, REST API, AngularJS and front-end workflow.

#### 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”.
- Application performance tuning using New Relic and JProfiler.

## TECHNOLOGIES USED

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

## LIVE DEMO

<https://preview-learn.blackboard.com> (ask me for login account if required)

## Bank of Communications

*Shanghai, China*

### SOFTWARE ENGINEER / SYSTEM ANALYST

*Apr. 2008 - Jul. 2015*

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

#### 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.

#### 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 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, BootStrap, WebSphere, MQ, ESB. Python, Redis

## Education

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### University of Waikato

*Hamilton, New Zealand*

#### MASTER OF INFORMATION TECHNOLOGY

*Feb. 2017 - Feb. 2018*

### Shanghai Jiao Tong University

*Shanghai, China*

#### M.S. IN PATTERN RECOGNITION & INTELLIGENT SYSTEMS

*Sep. 2005 - Apr. 2008*

### Xi'an Jiao Tong University

*Xi'an, China*

#### B.S. IN INFORMATION ENGINEERING

*Sep. 2001 - Jul. 2005*

## Referees

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

Other lecturers, colleagues available upon request