

# Yinsheng Zhou

SOFTWARE ENGINEERING LEADER · CERTIFIED SCRUM MASTER

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## Summary

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Seasoned and accomplished software engineer and architect with a history of helping enterprises to realize their IT R&D capabilities, while improving the companies' productivity and revenue. Adept in coaching software engineering team to consistently maximize team's agility. As a team leader, I am bringing forth an in-depth, detail-oriented, and forward-thinking perspective necessary to solve every problem encountered during the product or system development.

## Education

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### National University of Singapore

Singapore

Ph.D. IN COMPUTER SCIENCE

Jul, 2008 - Mar, 2013

- Got a 4-year full scholarship to pursue Ph.D. and defended my thesis in 2012 and earned my degree in 2013. My doctoral dissertation topic is Collaborative Mobile-Learning Systems for Music Education and Training.
- Full time direct PhD program from Bachelor degree.

### Fudan University

Shanghai, China

B.S. IN COMPUTER SCIENCE

Jul, 2004 - Jun, 2008

- Got student scholarships every year due to top ranking in academic performance.
- Attend national entrance examination (Gaokao) in China.

## Experience

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### Lazada South East Asia Pte Ltd, Alibaba Group

Singapore

LEAD SOFTWARE ENGINEER

Mar, 2021 - Aug, 2023

- Develop and manage 11 commercial data products for internal & external stakeholders with good user satisfaction.
- Consistently design and enhance the technical architecture to improve the product user experience, system stability, and developer efficiency.
  - Implemented entity change logging service based on Java serialization and use Java AOP to make it unintrusive on business logic.
  - Implemented staging and production data segregation solution using Mybatis plugin and Alibaba Druid.
  - Implemented database disaster recovery mechanism circuit breaking on master/backup database instances using sentinel library.
  - Improved API response time performance using cache, parallel processing, and SQL optimization by up to 35 times.
  - Developed using local test driven development, reusable software components, and low-code Function As a Service platform.
- Successfully build a pipeline of ETL data processing and machine learning model execution with Alibaba SchedulerX platform, in order to automate the process of model execution and data synchronization jobs for Lazada & Citibank Data Project and RedMart Price Kaki Project. It freed one developer from the mundane manual execution job so that he can spend more time on other projects.
- Monitor and report on the system stability issues by using monitoring dashboard and linux application logs.
- Split large and complex requirements into product increments, organize sprint planning sessions & standup, and assign tasks to developers.
- Led a 12-people team including Frontend (7) and Backend (5) engineers in the regional data team, hire, coach, and develop talents.

### Singapore Press Holdings

Singapore

PRINCIPAL ENGINEER, SOFTWARE

Jul, 2019 - Mar, 2021

- Worked with product managers and stakeholders to adopt the new market trend features into the products.
- Built fully automated CI/CD pipelines on AWS for containerized applications using Docker, AWS ECR and CodeDeploy.
- Designed a Behavior-Driven Rewards and Loyalty API SaaS product using the microservices architecture.
- Implemented several API microservices in Node.js Express and the Admin Portal in React/Redux.
- Deployed a centralized logging environment(ELK, CloudWatch, S3) which gather log data from docker containers and AWS resources.
- Zaobao Rewards Loyalty Programme won the Best in Audience Engagement in ADMA 2020. Since released to the market in Feb 2020, the program has lifted the audience engagement by 59%.
- Led a rewards and loyalty platform team (6 developers) and a digital sales and group marketing team (6 developers) using Scrum.
- Driving an interest group (Advanced Technology Lab) for AR/VR, AI, & blockchain technology in the media industry.

### Circles.Life

Singapore

PRINCIPAL ENGINEER

Dec, 2018 - Jun, 2019

- Built, architected and led the development of the telco BSS (business support system) middleware, which sped up the reliability and performance by 10 times.
- Recruited principal engineers, engineering leads, and senior software engineers.
- Mentored other developers, and led and shared DevOps best practice.

## Wirecard Asia Holding Pte. Ltd.

Singapore

### SENIOR DEVELOPER

May, 2017 - Oct, 2018

- Implemented a data cleansing and verification platform in Node.js Express and Angular.JS for parsing regional merchant documents.
- Built data pipelines to migrate the data into the more structured data models in Data Warehouse.
- Designed and built D3.js widget to visualize and customize the enterprise entity hierarchy.
- Developed an automated massive parallel processing pipeline to calculate merchant transaction fees, which resulted in 20 times processing speed and 2 times cost reduction.

## IBM

Singapore

### ADVISORY SOFTWARE ENGINEER

Mar, 2013 - May, 2017

- Developed enterprise applications for two blockchain projects, which got public exposure in MAS FinTech Festival 2016.
- Responsible for the UX/UI conceptual design, UI and backend API implementation, application's continuous integration with cloud, and project management.
- Built an automated data ETL system, and developed a web app for real-time visualization of all the vessels and heat-map visualization of the congested areas in the Singapore port.
- Developed train simulation visualization module, passenger flow visualization in React based on origin-destination pair predictive analytics, and incident analytics module.
- Developed a solution on mobile platform for identifying dengue hotspots using the information collected by operators. Demonstrated the solution to show its capability of preventing dengue outbreak in advance.
- Developed a web search engine in React on Bluemix (PaaS) to make the local charity organizations more transparent and eventually help charity donors to donate more efficiently.

## Skills

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**DevOps** AWS, GCP, Docker, Kubernetes, Jenkins, Ansible, Git, Jira, CI/CD

**Backend** Spring, Spring Boot, Express, Django, REST API

**Frontend** React, Redux, Angular.js, Vue.js, D3.js, jQuery, Flutter

**Database** MySQL, PostgresSQL, MongoDB, Vertica

**Programming** Java, Python, Javascript, Ruby, Golang, LaTeX

**Languages** English, Chinese

## Additional Work

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### Global Coding Bootcamps

Singapore

#### PART-TIME INSTRUCTOR

Mar, 2020 - Present

- Teaching web development and data science curriculums, including Javascript, Ruby, Python, scikit-learn, Express.JS, MongoDB, React, jQuery, algorithm, and coding interviews.

## Certifications

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### Certified ScrumMaster (CSM)

International

#### SCRUM ALLIANCE

Issued Nov. 2020 · Expires Nov. 2022

- Credential ID: 001136451 and Credential URL

## Honors & Awards

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2022	<b>FY2022 DT Annual Honours and Awards</b> , Enabling Customer Success - Lazada Seller Commitment Score	Singapore
2020	<b>Best in Audience Engagement</b> , Asian Digital Media Awards (ADMA)	Singapore
2015	<b>Winner</b> , IBM Chairman Environmental Award	Singapore
2015	<b>Finalist</b> , INFORMS Innovative Applications in Analytics Award	Philadelphia, U.S.A
2014	<b>Winner</b> , IS Technical Accomplishment	Singapore
2015	<b>Winner</b> , IBM Service Excellence Award	Singapore
2012	<b>Winner</b> , Student Travel Grant from ACM Multimedia	Nara, Japan
2012	<b>Winner</b> , NUS Research Achievement Award	Singapore
2011	<b>Winner</b> , ACM SIGCHI Honorable Paper Mention Award	Vancouver, Canada
2010	<b>Winner</b> , London Imperial College Research Skills Development Award	Singapore
08 – 12	<b>Winner</b> , NUS Graduate Scholarship	Singapore
2008	<b>Winner</b> , Excellent Graduate Award by Fudan University	Singapore
05 - 07	<b>Winner</b> , Fudan University Undergraduate Scholarship	Shanghai, China

# Publications

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<b>Collaborative Mobile-Learning Systems for Music Education and Training</b>	<i>Doctoral Dissertation</i>
YINSHENG ZHOU	2013
<b>Preservation Of Privacy Of Inputs</b>	<i>U.S. Patent</i>
YINSHENG ZHOU, YU CHIN FABIAN, PRALHAD, CHUN HUI AND VENKATRAMAN	Oct 2020
<b>Peer Voting on Blockchain</b>	<i>U.S. Patent</i>
ANUJ CHOPRA, YINSHENG ZHOU, YUAN YUAN, WENBIN ZHANG	Nov 2017
<b>Airborne Particulate Source Detection System</b>	<i>U.S. Patent</i>
KYONGMIN YEO, YINSHENG ZHOU, XIAO LIU, AND JAYANT R. KALAGNANAM	Dec 2016
<b>CESUS: A Cost-Effective Massively Parallel Processing Solution Under a Resource Strapped Situation</b>	<i>Technical Report</i>
YINSHENG ZHOU, AND GRIGORIY KUZNETSOV	2017
<b>Using the MOGLASS in group Music Therapy with individuals with Muscular Dystrophy: A pilot study</b>	<i>Music and Medicine (MMD), SAGE</i>
WANG FENG NG, YINSHENG ZHOU, YE WANG, AND PATSY TAN	2012
<b>MOGAT: Mobile Games with Auditory Training for Children with Cochlear Implants</b>	<i>ACM Multimedia, Nara, Japan</i>
YINSHENG ZHOU, KHE CHAI SIM, PATSY TAN, AND YE WANG	Oct 29 - Nov 2, 2012
<b>MOGAT: A Cloud-based Mobile Game System with Auditory Training for Children with Cochlear Implants</b>	<i>ACM Multimedia, Nara, Japan</i>
YINSHENG ZHOU, TONI-JAN KEITH P. MONSERRAT, YE WANG	Oct 29 - Nov 2, 2012
<b>A Tempo-Sensitive Music Search Engine With Multimodal Inputs</b>	<i>MIRUM, Scottsdale, Arizona, USA</i>
YU YI, YINSHENG ZHOU, YE WANG	2011
<b>MOGLASS: Evaluation of a Collaborative System of Mobile Devices for Classroom Music Education of Young Children</b>	<i>ACM CHI, Vancouver, BC, Canada</i>
YINSHENG ZHOU, GRAHAM PERCIVAL, XINXI WANG, YE WANG, SHENG DONG ZHAO	May 7 - 12, 2011
<b>MOGLASS: A Collaborative System of Mobile Devices for Classroom Music Education</b>	<i>ACM Multimedia, Firenze, Italy</i>
YINSHENG ZHOU, GRAHAM PERCIVAL, XINXI WANG, YE WANG, AND SHENG DONG ZHAO	October 25 - 29, 2010
<b>MOGFUN: Musical mObile Group for FUN</b>	<i>ACM Multimedia, Beijing, China</i>
YINSHENG ZHOU, ZHONGHUA LI, DILLION TAN, GRAHAM PERCIVAL, AND YE WANG	October 19 - 24, 2009