

# Tom Yuan's resume

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Nationality: China

Job Direction: Backend Developer, Full Stack developer

## Personal advantage

- **full stack** development capabilities
- Proficiency in big data technology, including the first generation ( `MapReduce` + `Storm` ) and the second generation ( `Spark` + `Flink` )
- Proficient in back-end development, proficient in using `Spring` framework
- Familiar with front-end development, familiar with `TypeScript` , `JS` , `CSS` , `React` , `Webpack` , etc.
- Have strong learning ability and motivation
- Pursuit of technology, pursuing elegant design of architecture
- Proficiency in using design patterns to solve complex business problems
- Personal project: <https://grace-note.app> , A knowledge management app based on git (like Notion)
- Designed a state management framework `Redux-Commands` based on `Redux`

## Education experience

- Senior School: Mianyang Middle School in Sichuan Province, China.  
Participated in the NOIP computer competition, won the provincial first prize, and was recommended to Xi'an Jiaotong University
- University: Xi'an Jiaotong University. Computer Science and Technology

## Work experience

**2021/11 until now Jerry Services, Inc. (US, Remote)**

*Jerry.ai is an auto finance startup based in Silicon Valley. The company's App (Jerry) helps customers choose the cheapest and most suitable car insurance from thousands of car insurance, helping users save costs.*

- Telematics project
  - Project goal: increase daily activity and increase user stickiness. By introducing social features, users can rank driving scores and share trips with friends
  - Responsibilities: Full stack engineer
    - The front end is based on the react-native technology stack, involving the development of various complex charts, animations, and forms.
    - The backend is based on `nestjs` + `apollo` + `typeorm`, providing `graphql` interface: including friend relationship management, feed management

## **2018/7 - 2021/11 Beijing Sankuai Technology Co., Ltd. (Meituan.com)**

*A Chinese shopping platform for locally found consumer products and retail services*

- Service-oriented construction of dish labels
  - **Project goal:** By digging dish, comparing with user tags, recommend the most suited food to users, reducing user operation route to pay, and increasing user paying conversion
    - Provide label query for takeaway dishes
  - Main usage scenarios:
    - Intelligent ordering assistant (help users match more suitable dishes)
    - Search and sort (match between dish label and user label)
    - **Personal responsibilities** system maintenance, performance optimization, daily request development
- Portrait Platform
  - **Project goal:** Through the integration of different dimensions of data, the standardized management of the data is unified, providing unified forward and reverse investigation capabilities, and providing important data support for the refined operation and management of each business party
  - **Personal Responsibilities:** Technical owner

- **Important Output:**
  - System Development
    - Responsible for the model design of the entire system
    - Designed and implemented the Spark data import task framework and the Spark group filtering framework
  - Performance optimization
    - Designed and implemented a high-performance serialization library, which increased the compression ratio by **40%**, and the deserialization performance by **7.39** times
    - Participated in the development of a bitmap-based group selection service (Bitcube), compared with the previous ES, filtering out 100 million users, the time was reduced from **1.7 hours** to **4 minutes**
    - By introducing routing + local caching mechanism, the performance of profile query is improved by 2.5 times. Currently, the single machine supports 24K QPS
  - Business effect
    - advertisements increase CTR by **22.4%** by using user portrait tags on the portrait platform
    - The customer service center, with the help of user labels, prioritizes the enrollment of high-value users, reduces the queue time by **70%**, and improves the case-closing efficiency by **20%**

## **2016/6-2018/7 Hangzhou Youzan Technology Co., Ltd.**

*SaaS system for micro-e-commerce*

- **Order details as a service**
  - **Project Objective:** Provide query of order details and logical assembly
  - **Personal Responsibilities:** Framework design and implementation, module implementation
  - **Important Output:**
    - Self-developed DAG framework to cope with complex detailed results assembly, which improves the scalability and testability of business code while improving performance.

- **Research and development of order data synchronization platform**
  - **Project Objectives:**
    - Provide data synchronization for heterogeneous storage of order data
    - Support flexible configuration of synchronization tasks
  - **Personal Responsibilities:** Framework design and implementation, module implementation
  - **Important Output:**
    - Job configuration with web, easy to extend, support incremental + full synchronization
    - The research and development manpower has been increased from the previous `2 man-day` to `0.5 man-day`

## 2015/4-2016/6 Hangzhou Tongdun Technology

*Intelligent analysis and decision-making services (portraits)*

- **TongDun Anti-Fraud Engine**
  - **Project Objectives:**
    - Provide a multi-tenant rule configuration system
    - Implement risk assessment engine
  - **Scenario:** Serving various industries such as finance, e-commerce, social networking, and gaming, providing a scoring mechanism for personnel
- **Building of Logging Platform**
  - **Project Objectives:**
    - Provide a distributed log query platform platform
    - Provide log SDK for easy access
    - **Technology Stack**
      - ELK ( `Elasticsearch` + `Logstash` + `Kibana` ), due to the performance problem of logstash, the component was rewritten in Java
      - Logback kafka-appender
- **Monitoring platform**

- **Project goal:** To build a monitoring platform that is easy to access and supports flexible rule configuration
- **Technology Stack:**
  - **InfluxDB** : Provides storage of monitoring data
  - **Grafana** : Provide configuration display of monitoring
- **Gateway system** (based on go language)
  - **Project goal:** Provide a unified management platform for online http applications
  - **Important Output:** Simplified the deployment of online http services. Up to now, nearly 100 applications have been connected

## 2014/12-2015/4 Hangzhou Health on mobile Technology

*Internet medical platform*

- **Chronic Disease Butler app**
  - **Project goal:** Provide backend api and data support for the mobile App
  - **Personal Responsibilities:** Responsible for the database design, task splitting, back-end architecture design and development
  - **Important Output:**
    - Efficiently complete the model design of complex functions in the product design, with high scalability, and flexible support for the iteration of business requirements

## 2011-2014/12 Taobao (China) Software Co., Ltd. (www.taobao.com)

*Chinese Top1 E-Commerce platform*

- **Taobao, Tmall search offline big data processing**
  - **Project goal:** Provide data support for Taobao and Tmall search engines
  - **Personal Responsibilities:** System maintenance, framework optimization
  - **Technology Stack:** Hadoop/HBase/Redis/Hive
  - **Important Output:**

- Optimized the offline processing process and cut the overall task time by half

## **Personal Evaluation**

10 years of Java work experience. I love technology and have technical pursuits. There are no restrictions on technology learning. By learning technologies in different fields, I can absorb different design concepts in them, thereby improving my software design ability.