# Yang Zhang

**China**

## Education

Master, Computer Science and Technology, Xi'an Jiaotong University, CN, 2011

Bachelor, Computer science and technology, Xi'an Jiaotong University, CN, 2009

## Languages

English - Very Good

Chinese (Simplified) - Fluent

## Publications

The integration and analysis of IBM SPSS Statistics with user-defined Python module, 2014

Design pattern application on command-line interactions development, 2013

System and method to detect vehicle queuing events on road , 2017

## Profile

As an AI expert and IBM Certified Senior Data scientist, I have more than 8 years of experience in enterprise big data analysis and solution development. At least 5 years experience in business analysis and cognitive solutions. Including big data analysis, machine learning, natural language understanding, image analysis, cognitive computing and other solution design, algorithm model research and development, project implementation and customer service experience. Over the years, he has been committed to the intellectualization of manufacturing industry, leading and participating in a number of customer projects of industrial intellectualization. In addition, he also has in-depth understanding and project implementation experience in the fields of intelligent transportation and artificial intelligence. As a business analysis engineer, I have the ability to deeply understand, describe and analyze business needs. Including customer demand understanding, demand transformation, demand realization and demand verification. As a product manager, initiate and be responsible for the design, development and customer consultation of multiple solutions. Including business value evaluation, business process sorting, customer service consulting and scheme design.

## Key skills

1. Solid experience in leading, designing and implementing cognitive solutions
2. Solid experience in industrial solution design and development
3. Rich experience in advanced business analysis
4. Proficient in Watson cognitive services and advanced analysis services
5. Rich experience in advanced data analysis practice
6. Proficient in various algorithms and data mining tools
7. Proficient in data analysis, model training and debugging
8. Proficient in Java, Python and C.
Therefore, basically, I have the ability to initialize and lead solutions in every business industry. At the same time, I also have advanced analytical skills in data analysis and business analysis to complete big data solutions and business architecture. In addition, as the person in charge, I lead the team to develop solutions.

## Work experience

### Offering manager
IBM, China | Mar 2019 - Dec 2021

As a offering manager, I initialized and I'm responsible for IMOP solution's design, development and offering. Including business value estimation, business flow/solution design, etc.

## Senior Data scientist

IBM, China | Jan 2017 - Present

I have served as a solution leader and data scientist in many projects, including ose railway, JX refinery in Japan, Tarim Oilfield, PetroChina, Norfolk railway, Longyuan Power, Hangzhou tobacco project, csot, Guohua Power, etc. In addition, I have led and been responsible for business analysis, solution design and implementation of cognitive solutions in many projects, such as IBM cognitive insight dashboard, GCG cement production, cognitive architect, emotion analysis and other fields. At the same time, as a senior business analysis expert, I am responsible for business demand analysis, project risk management and other contents in many projects.

Some project experiences:
IMOP intelligent maintenance and operation platform,  Data scientist and Product manager
Cognitive Architect,  data scientist, business analysis expert
Intelligent search, data scientist, business analysis expert, solution leader
Intelligent Q&A system data scientist, solution leader
Intelligent data insight dashboard, data scientist, Solution leader
GCG cement production intelligent, data scientist, solution leader


## Advisory Data Analyst

IBM, China | Sep 2012 - Dec 2017

1. Consulting analysis experts and consultants. Responsible for customer demand analysis, data analysis, software / asset solution development and service delivery
2. Solution architect. Responsible for leading the design and development of solutions.

Some project experience:

BBA, automobile manufacturing anomaly detection and process optimization, data scientist

Norfolk railway prediction and analysis project, data scientist

BNSF railway bearing warning prediction project, data scientist

Japan oil pipeline prediction and analysis project, data scientist

Tarim Oilfield, dynamic equipment fault prediction project, data scientist

Guohua feed pump failure prediction project, data scientist

Longyuan electric power fan bearing fault prediction project, data scientist

Chongqing intelligent transportation project, data scientist

IBM solution intelligence assessment project, data scientist

**Software Engineer**
EMC, China | Jul 2010 - Sep 2012

Software development. Working on MCR（Multi-

Core RAID）platform control path development.

## Assignment history

Cognitive Architect | Aug 2017 - Present

Cognitive Architect is a cognitive solution for proposing solution architecture to client during different client engaging phases.

Working as a business analysis, I am responsible for get business requirements and analysis them; cognitive feature such as chatbot, recommendation etc. And also I am responsible for partial project management work.

Contribution: 1. working with product owner closely to collect business requirements 2. Describe and analyze business requirements into doable features.  3. Working as a bridge between production owner and development team  4. Control project risk and solve all issues.  5. be responsible to drive and design cognitive features related to data analysis and AI. such as chatbot, smart recommendation, etc.

CQPTI | Mar 2017 - Jul 2017

Cognitive traffic solotion in Chongqing city

Contribution: Lead the cognitive analysis algorithms design and compliment for the following theme:  1. congestion road identification  2. congestion tendency analysis  3. vehicle queuing event detection and analysis  4. congestion area detection throughout the whole road net work  5. Short-term traffic prediction  6. Long-tern traffic prediction

Domestic clients and Word- wide clients | Jan 2017 - Present

 Clients engagement and solution lead domestically and abroad.

Contribution: Leaded big data analysis projects and cognitive solution to solve clients' functional requirements and non functional requirements precisely. And facilitated in project deliver and deployment to clients. Besides, I manage the team by following Agile methodology.I'm responsible for  1. business analysis  2. solution design  3. facilitating the architecture design  4. team mangement  5. client engagements  6. business negotiations  etc..

Banking | Dec 2016 - Mar 2017

An intelligent cash management based on big data analysis and AI

Contribution: 1.Client requirements analysis and design the scenarios.  2. Set up the work scope and established the work design with team menbers.  3. Designed and implemented data analysis module.

DIOS | Sep 2016 - Dec 2016

Integrate Weather Data into DIOS in order to utilize weather information to do prediction

Contribution: 1. Set up the work scope and established the work design with global team  2. Designed and implemented key algorithms, including: weather data extraction, data processing, data utilization and so on.  3. Designed and implemented weather data analysis module.

Client Engagement | Sep 2016 - Dec 2016

Artificial Intelligence Investment Advisor

Contribution: 1. Client requirements analysis and design the scenarios.  2. Set up the work scope and established the work design with team menbers.  3. Designed and implemented data analysis module.

Client Engagement | May 2016 - Aug 2016

Project Description:  Text minning and semantic analysis in intelligent answering solution.

Contribution: 1. Designed and implemented ACE model.  2. Designed and implemented key text mining algorithms, including: keywords extraction, text semantic matching and so on.  3. lead and implemented processing the non-structure data(ACE)into structure data by leveraging knowledge graph.

Electric Power Company | Dec 2014 - Feb 2015

Data Analysis service delivery

Contribution: 1. Provide data analysis service for wind turbine failure analysis, including  failure pattern analysis, failure prediction, anomaly detection and so on  2. Provide consulting service for wind turbine predictive maintenance.

IBM GBSC | Feb 2014 - Present

Solution Architect for Predictive Asset  Optimization Maintenance Library (PAOML) asset , data analysis leader and related customer PoC delivery.

Contribution: 1) Be responsible for analytics tasks in asset dev/integration and customer PoC delivery.  2) Asset based customer PoC delivery and advanced analysis/consulting projects, e.g,  a. Japan refinery oil pipe corrosion prediction;  b. Refinery failure predictive maintenance for Motor Pump Units, etc.;  c. Failure prediction for  compressor unit   d. American rail way. Rail track wear prediction.

GBS | Sep 2013 - Feb 2014

A  text mining project- Proposal Quality Assessment , Standardize the proposal writing and assess process.

Contribution: 1.Designed and implemented the initial PQA application from architecture to detailed development.  2.Designed and implemented complex text mining algorithms with Java and OpenNLP in PQA project.  3.Developed and integrated Python and R script with Java to implement keywords extraction analytic characteristics.


NBAOPT | Sep 2012 - Jul 2013

NBAOPT asset development. NBAOPT is part of the signature solution.

Contribution:  Mainly focus on： 1. Java Development;  2. NBAOPT Architecture development and improvement.  3. NBAOPT World Wide technical support.  4. Work Products development