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## Work Experience \_

iReader Inc. Beijing, China

**ALGORITHM ENGINEER** responsible for recommendation algorithm design and implementation

July, 2017 - July, 2018

- Designed the recommendation system build on **Hadoop Stream** which serves twenty million active readers daily
- Extracted latent features of consummers, which provide support to the service of "Guess what you like", with neural collaborative filter (solve collaborative filter with neural network). (**Python**).
- Extracted book features for all the books in store, which used in the service of "similar book recommendation", with word2vec model and updated features automatically every month. (Python, crontab)
- Designed and implemented the real-time recommendation system by combining users' long term interests (update daily) and short term interests (update every minute). (**Python, Java, Spring**)

# Projects\_\_\_\_\_

#### **Crop Insurance Dapp: Design and Implementation**

**ISU TERM PROJECT** 

- A decentralized application (Dapp) based on **BlockChain** to solve inefficiency, fraud, human error and cyberattacks in crop insurance.
- Provide web interface to farmers, insurance agents and third party participants like weathers, markets, governments, etc. (Web3, HTML/CSS, JS).
- Setup and maintain a blockchain with **Ganache** to store participants' information and transaction records.
- Design and deploy smart contract for every participant in **Solidity**.

#### Deep Learning-based Self-learning Checkers Game Agent

**ISU TERM PROJECT** 

- Design and implement a *checkers* game agent. The agent is expected to learn by playing a large number of iterations of the game against designed opponents and itself. The MOVE is decided an evaluator which is a three layer neural network. (**Python**)
- Design and implement the opponent agent with Monte Carlo Search Tree. (Python)
- Design and implement a graphic user interface so that the designed agent could play and learn from real people. (wxPython)

## Public opinion analysis and visualization

CHINESE ACADEMY OF SCIENCE TERM PROJECT

- This project analysis millions of posts and comments downloaded from weibo (Chinese) in certain period of time, say ten minutes, and visualize the trend of public opinion.
- Develop a web service with Flask. It process posts and comments at backend and reply to frontend with processed data. (Flask, Python)
- · Visualize public opinion with d3 library and add user interaction to provide more flexible and necessary data to users. (d3, HTML/JS)

### Skills\_

Programing Skills Python, Java, C/C++, Hadoop Streaming, JS, Shell, network programming, HTML/CSS, d3, MATLAB

Framework & Library Skills Flask(Python), Spring(Java), tensorflow, pytorch

Machine Learning Skills xgboost, PU learning, reinforcement learning, GBDT, LSTM, BERT embedding, svm, autoencoder, kmeans

**Other skills** Hadoop settings, gui, latex, data visualization, blockchain

#### Education\_

**Iowa State University** 

Ames, IA

PhD (pursuing) in Computer Science, GPA (by now): 3.61/4.00  $\,$ 

Now

Institute of Software, Chinese Academy of Science.

Rojijna China

MASTER IN COMPUTER SCIENCE, GPA: 3.78/4.00

June 2017

University of Science and Technology of China.

Hefei, China

BACHELOR OF ELECTRONIC SCIENCE AND TECHNOLOGY, GPA: 2.76/4.00

July 2012