Wang Yang
Target: Software Engineer

PERSONAL DETAILS

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EDUCATION

MSc. Computer Science   2009-2012
Chinese Academy of Science Software Institude
BSc. Telecommunication Engineering   2005-2009
Queen Mary, University of London
Beijing University of Posts Telecommunications

WORK EXPERIENCE

Senior Software Engineer, Tencent   2012 - present

1. Online Advertising Training System. 2015.1 - now

I developed a distributed model training system. The model is used to predict Click Through Rate(CTR) of Advertisement. The system is based on Storm/Kafka-like infrastructure. The system get streamed training data and then feed into one-pass algorithm(FTRL) and periodically dump the model for serving. In order to equally placed the memory consumed component I also designed custom scheduler of storm.

2. Training Data Generation System. 2013.1 - 2014.12

I developed training data generation system for both online and offline model training. Firstly I got the origin click/impression log from distributed queuing system(Tube), then use storm divided it into different Ad position and extract keys to join with user/ads/context features, and finally dump training data into HDFS and Tube for model training purpose. I use 32*8 CPU to handle 15 Billions impression for each cluster set(I have 2 set, one for production, another for experiment)

3. Online Training Monitor 2015.1 - 2015.5

I developed plenty of metric for monitoring task, for the model specific: Delay AUC, Real-time AUC, Loss, Miss-classification-rate, model-size; for the system specific: memory-used, batch-process-time. This project initially base on Graphite then migrate to a more featured monitor system.

4. Distributed Database Engine Optimizer 2012.6 - 2013.1

I developed Bool Expression Analyzer which is the fundamental component of Optimizer in SQL compiler. I implemented the Quine McCluskey algorithm to generate conjunctive normal form(CNF) and use Petrick Method to get Minimal-CNF. Based on the bool expression analyzer, I developed Predicate Push-down Optimizer for logical plan. And I also developed Reduce Shuffling Optimizer for physical plan.

Side Project

1. Image Caption Generation. 2016.6 - 2016.8

I developed a web service of image caption model based on neuraltalk2 which use pre-trained CNN model and LSTM RNN cell

SKILLS

Languages	Java, Python, C++, Unix-like (*nix) Shell
Knowledge	Data structure and Algorithm, Machine Learning, Distributed System