

Address:

Tel:

E-mail:

Education

University at Buffalo

Master of Science in Computer Science

University of Rochester

Master of Science in Chemical Engineering

Beijing Technology and Business University

09.2016-06.2018

09.2013-06.2016

Bachelor of Engineering, majored in Applied Chemistry

Skills

programming languages: Java, Python, C++, MATLAB, SQL

Courses

Data structure, database system, introduction of machine learning, data mining

Projects

Build Query Evaluator

- Parse SQL queries by using JSQLParser and give a response.
- With the memory limitation, use External Merge Sort Algorithm for the sort operator and group-by operator.
- Optimize the implementation to support join algorithms: Sort-Merge Join and 1-Pass Hash Join.

Clustering Algorithms

- Implement three clustering algorithms: K-means, Hierarchical Agglomerative clustering with Single Link (Min) and Density-Based clustering, find clusters of given datasets and validate the clustering results.
- Implement MapReduce K-means and compare the clustering result with non-parallel K-means on the given datasets.

Classification Algorithms

- For given datasets, implement classification algorithms: Nearest Neighbor, Decision Tree, Naïve Bayes, Random Forests and Boosting which are based on my own implementation of Decision Tree.
- Adopt 10-fold Cross Validation to evaluate the performance of all methods on the provided datasets in terms of Accuracy, Precision, Recall, and F-1 measure.

Experience

Beijing International Engineering Consulting Co., Ltd

09.2010-07.2013

Consultant in the new energy division

- Collected the latest development information in the fields of Medicine, Chemical Engineering and Low carbon
- Wrote the management report and gave advices to the following executive division