Chengsong Tan Curriculum Vitae

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EDUCATION

BSc in Computer Science

2014-2018

University of the Chinese Academy of Sciences, Beijing China

Visiting Student

2017-2018

Oxford University, St. Edmund Hall, UK

PhD in Computer Science

2018-present

King's College London, UK

won a full scholarship from the Chinese Scholarship Council and King's College London

PROJECTS

A fast regular expression matching algorithm using derivatives 2018-present

King's College London

Improved the derivative algorithm for regular expressions by Brzozowski, Sulzmann & Lu. The improvement drastically reduces the size of derivatives.

A short survey on graph isomorphic problems

2016 Summer

Institute of Software, the Chinese Academy of Sciences

Worked out a solution for a linear time algorithm for checking if two graphs have matching degree sequences.

A data mining program for the transportation system of the Guangdong Province

2017-2018

University of the Chinese Academy of Sciences

Developed a program for stream data mining; explored mining techniques for large data transportation systems.

A simplified version of the TCP protocol http://github.com/hellotommmy/cTCP Uses the NewReno algorithm for congestion control.

A simple database system

http://github.com/hellotommmy/db

Proof-of-concept implementation of database system supporting SQL queries.

VOLUNTEER AND EXTRACURRICULAR ACTIVITIES

Piano Accompanist

2014-2015

for the PhD-student choir, University of the Chinese Academy of Sciences Accompanied the choir in 10 concerts.

Voluntary Piano Teacher

2015-2016

at the student music club, University of the Chinese Academy of Sciences Taught 4 students over 2 semesters.

Open Swimming Turnaments

2015-2018

University of the Chinese Academy of Sciences

Participated in 3 open tournaments in the Water Cube in Beijing.