

Education

**Master of Science in
Computer Science,**
2013-2015
Worcester Polytechnic
Institute, US

**Bachelor in
Computer Science,**
2008-2012
Tianjin University of
Technology, China

Skills highlights

Programming Languages:

Python, C++, JAVA, Scala,
Matlab, SQL, VBA, LaTeX,
Markdown, etc.

Scientific computation:

CPLX, CUDA, Gurobi, CVX

Database:

MySQL, Oracle, MS SQL
Server, NoSQL, etc.

Distributed computation:

Apache Hadoop, Apache
Spark, HDFS, etc.

Data processing:

ETL, data mining, mathematical
optimization, ANN, SVM, etc.

Systems:

AWS, Linux, Unix, OS X,
Windows, etc.

Development env:

Eclipse, Visual Studio, Vim, etc.

Address

45383 Onondaga drive,
Fremont, CA, 94539

Tel

+1(774)3295650

Mail

lichao90@outlook.com

Web

chaopli.github.io



ChaoLi

Software Engineer

I have pursued in computer science for 7 years, learned more than 10 programming languages and various RDBMSs, libraries; participated in more than 5 programming projects. I have been interested in algorithms for 5 years and did lots of research resulting in 2 Journal Publications and 1 Book. Now seeking for an entry level position exposed to development, algorithms or data science. Actively opened to Machine Learning knowledge.

Projects

Network protocol simulation and application

02/14 - 05/14

Computer networks course project

- Team leader of a group collaborating with another 2 people.
- Emulated the selective repeat algorithm and go back N algorithm of TCP protocols, running on a emulated linked layer, using Linux socket.
- Implemented a chat application with server and client using Linux sockets with the ability to handle multiple clients simultaneously.

Parallelize the convolution based Ultra-sound image emulation algorithm

04/13 - 05/13

Intern project

- Worked following supervisor, and studied the convolution based Ultra-sound image emulation algorithm.
- Parallelized the CPU implementation taking advantage of CUDA.
- Paralleled program runs at least 10 times faster than the original program.

Personal multimedia files management system

Undergraduate study course project

- Team leader of a group collaborating with another 3 people.
- Responsible for database design using MySQL and logical layer using Qt SDK.
- Merged the logic layer to the UI written with Qt SDK by other team members.

Study on the Object Tracking in Video Stream

09/10 - 10/11

College student innovation project

- Studied Meanshift algorithm and Particle Filter algorithm;
- Implemented both of the above two algorithms in C++ and OpenCV;
- Blended the two algorithms.

Publications

On the combinatorics of binary series-parallel graphs

Micha Hofri, Chao Li, Hosam Mahmoud

Accepted by Probability in the Engineering and Informational Science.

Recovering All Generalized Order-Preserving Submatrices: New Exact Formulations and Algorithms

Andrew Trapp; Chao Li; Patrick Flaherty

Accepted by Annals of Operations Research

Book

Semidefinite programming, binary codes and a graph coloring problem

Chao Li

Published by LAP LAMBERT Academic Publishing, ISBN-13: 978-3-659-76426-4

Note: For details of book and publications, please find on my website: scan the QRC or open in browser.