# Chengjun Jia [LinkedIn]


**Contact Information**

Room 3-421, FIT Building, Tsinghua University
Beijing, China, 100084
+86-17888842657
jcj18@mails.tsinghua.edu.cn


**Research Interests**

Software-Defined Networking, Cloud Data Center, Regular Expression, Traffic Control

**Education**

**Ph.D. Student, Tsinghua University** *Sept. 2018 - present*
Courses: Pattern Recognition; Algorithm Analysis and Design; Introduction to Distributed Systems (MIT 6.828)
Advisor: Prof. Jun Li

**Dual Degree in Economics, Tsinghua University** *Sept. 2015 - Jun. 2018*
**Bachelor of Engineering, Tsinghua University** *Sept. 2014 - Jun. 2018*
GPA: 90/100 Rank: 8/139
Thesis: **Design and Evaluation of Traffic Control Algorithms for Multi-core processor in DPDK**
Advisor: Prof. Jun Li

**Publications**

**Chengjun Jia**, Zhe Fu, Xiaohe Hu, Shui Cao, Liang Wang, Jun Li. Multi-Core HTB for Bandwidth Sharing. Proc. of ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS'18), 2018. (poster).

**Research Projects**

**Traffic Control in Cloud Datacenters**
*Research Assistant, Huawei 2012 Lab* *April. 2018 - July. 2018*

- In the Cloud Data Center, tenants demand reasonable network bandwidth guarantees while operators want to fully utilize overall bandwidth resources of network. The traffic control based on the hierarchical bandwidth sharing structure can be leveraged to meet these requirements, and in order to improve the performance, multi-core platforms come to the rescue.

**Regular Expression Group**
*Research Assistant, NSLab, Tsinghua University* *Oct. 2017 - Mar. 2018*

- There are some similar characteristics between Regular Expression and Packet Classification. Now that there are some effective methods to group packet classification rules, there may be some effective methods for regular expression.

**Courses**

**Formal Methods in Computer Network and Protocol Engineering**
*Graduate Class; A-*

- Computer network verification: HSA, Batfish, p4v, BUZZ and so on.

**Algorithm Analysis and Design**
*Graduate Class; A-*

- The textbook is *Introduction to Algorithms*.

**Introduction to Distributed System**
*Graduate Class; B*

- GFS, BigTable, Spark, Raft and so on

**Pattern Recognition**
*Graduate Class; A-*

- Bayesian estimation, SVM, CNN, k-means clustering, Random Forest and PCA.
- Some solutions to the homework can be found in my github.

**Skills**

Programming:

- C/C++, Shell, Java, Verilog, Python, Matlab, DPDK