

+1 (702) 237-0094 jiahaoli@mit.edu mandarin/english

### education

2018-2019 Massachusetts Institute of Technology, Cambridge, MA

Master

M.S. in Computer Science and Engineering. GPA 5.0/5.0. Relevant courses: Computer Networks, Database Systems.

2014-2018 Massachusetts Institute of Technology, Cambridge, MA

Undergraduate

B.S. in Computer Science and Engineering. GPA 5.0/5.0.

Relevant courses: Advanced Performance Engineering, Distributed Systems, Operating Systems, Design and Analysis of Algorithms, Advances in Computer Vision, Advanced Natural Language Processing.

#### technical skills

Set | Programming languages

5 Years or More: C++, Python / 3 Years or More: Ruby, Objective-C, Java

Set || Low-level performance engineering and operating system knowledge Set || Data structures and algorithms knowledge and research experience

## internships & projects

2019-Present Hudson River Trading - Core Developer

https://www.hudsonrivertrading.com

Worked in C++ on distributed computation cluster infrastructure - including job scheduler, data caching layer,

and job efficiency monitoring.

Worked in Python on the framework for structuring/submitting distributed computation workloads.

Worked on optimizing cluster-wide job memory usage and job efficiency.

2018 Facebook - Software Engineer Intern

https://facebook.com

Created a parser library for the Thrift compiler, and two code linters for the Thrift language.

Designed and implemented a plugin system for Thrift that enables custom extensions to the compiler.

2017 Instagram @ Facebook - Software Engineer Intern

https://instagram.com

Implemented optimizations that reduced server memory usage per request served by 12% and server CPU

usage per request served by 5%, and increased request capacity per server by 10%.

2017 **EECS Research and Innovation Scholar – MIT SuperUROP Research Program** 

https://superurop.mit.edu

Implemented optimization passes in Rhino – an LLVM-based compiler aiming to better optimize parallel program across languages and parallel frameworks. Reduced runtime for up to 20% in certain benchmarks.

2016 **Pure Storage - Software Engineer Intern** 

https://purestorage.com

Optimized write path throughput performance for data being replicated between arrays.

Implemented changes that enabled an increased number of replication pairs to be set up on a single array.

2015 **Pure Storage - Software Engineer Intern** 

https://purestorage.com

Implemented the bandwidth shaping and batch restoration features for cross-array data replication.

Designed and implemented a transaction framework for atomically updating array database.

### major honors & awards

2011 28th China National Olympiad in Informatics, Gold Medal

Selected into IOI China National Team Training Camp

# leadership

2015-2018 The MIT Tech - Technology Director

Led the development of the new website of MIT's oldest and largest campus newspaper.

Adapted the publishing production workflow to work with the new content management system.