

XIAO SHI

173 Charles St, Cambridge MA 02142
(203) 745-9782 sx@shixiao.org

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| EDUCATION | Yale University , New Haven, CT <ul style="list-style-type: none">• B.S. Computer Science with distinction; Magna Cum Laude• Cumulative GPA: 3.91/4.00, Major GPA: 4.00/4.00 Phi Beta Kappa Honor Society• Thesis: Iterative Algorithms for Lipschitz Learning on Graphs• Selected Coursework: Algorithms, Convex Optimization, Complexity Theory, Spectral Graph Theory; Operating Systems, Distributed Systems, Advanced Cloud Systems; Networks, Databases, Software Engineering | Sep 2011 – Dec 2015 |
| WORK EXPERIENCE | Software Engineer , Facebook, Cambridge, MA <ul style="list-style-type: none">• Develop globally distributed storage and caching systems to serve data• Design and implement distributed systems to enhance data consistency Research Assistant , Prof. Dan Spielman, Yale Inst. for Network Science <ul style="list-style-type: none">• Designed and optimized linear solver for Laplacian systems• Analyzed convergence of iterative algorithms for absolutely minimal Lipschitz extension on graphs Software Engineer Intern , Facebook, Menlo Park, CA <ul style="list-style-type: none">• Added features in the Hack language that allow users to reflect on types in a type-safe manner• Realized and optimized type introspection feature in HHVM (the runtime virtual machine) Research Assistant , Prof. Yang Richard Yang, Yale CS Dept <ul style="list-style-type: none">• Designed and refined Application-Layer Traffic Optimization (ALTO) Protocol• Architected ALTO integration into the OpenDayLight controller• IETF drafts: draft-ietf-alto-incr-update-sse, draft-shi-alto-yang-[json model]• Designed and implemented Megellan, a system which compiles high level Software Defined Network policies into OpenFlow flow tables. (Technical Report: YALEU/DCS/TR1504) Software Developer Intern , D. E. Shaw & Co. <ul style="list-style-type: none">• Implemented a python library Transposer to perform map-reduce on remote clusters using ØMQ• Created interactive visualization tool for the LATTE market simulator• Developed a trading strategy to identify and capitalize on sudden extreme price movements Research Intern under NSF(REU) grants, CertikOS Group, Yale CS Dept <ul style="list-style-type: none">• Modified and enhanced Real-Time Operating System nuttX for PX4 drone platform• Analyzed and benchmarked nuttX and CertikOS (Certified Operating System Kernel)• Researched on migrating CertikOS from Intel x86 to ARM architecture Undergraduate Teaching Fellow , Yale University <ul style="list-style-type: none">• CS112/CS113 Programming and Entrepreneurship, MATH244 Discrete Math, CS365 Algorithms• Aided curriculum development: CS468 Computational Complexity, CS426 Decentralized Systems | Feb 2016 – Present Jan 2015 – Dec 2015 Jun 2015 – Aug 2015 Sep 2014 – Dec 2015 Jun 2014 – Aug 2014 Apr 2013 – Jun 2013 Jan 2012 – Dec 2015 |
| SELECTED AWARDS | ACM/ICPC (International Collegiate Programming Contest), Greater New York Region <ul style="list-style-type: none">• Top all-freshman/sophomore team, ranked 10th overall out of 50 college teams National Olympiad in Informatics , China <ul style="list-style-type: none">• Attained 1st (top 1%) or 2nd Prize all 5 years. Perfect score in 2007 and 2008.• Top 0.04% (35 out of over 80000 contestants), candidate for Provincial Programming Team Intel Application and Innovation of Computer Science Contest , China <ul style="list-style-type: none">• Individual Silver Medal, 6th of 100 finalists; 3-person Nanjing Team ranked 2nd of 30 teams Olympiads in Mathematics (China and USA) <ul style="list-style-type: none">• 1st Prize (top 3%), National Olympiad in Mathematics, China• 1st Place in Missouri in AMC12/AIME, top 0.6% in USA, qualified for USAMO | 2011 2006 – 2010 Mar 2008 2007 – 2009 |
| ACTIVITIES | International Ambassador (Tour Guide) , Yale Visitor Center Tenor and Business Manager , Yale Society of Orpheus and Bacchus <ul style="list-style-type: none">• Elected Business Manager for 2013/14 Academic Year: leader of the entire organization, managing finances, world and domestic tours, album production, publicity and alumni co-ordination | May 2012 – May 2015 Sep 2011 – May 2015 |
| SKILLS | Programming C/C++, Java, Python, Bash, Scheme, assembly, SQL, OCaml Data Analysis Spark, numpy, Matlab, Julia, Mathematica Web CSS, HTML, Javascript, jQuery, MySQL, Php, Hack, Ruby (on Rails) Graphics Flash, Illustrator, InDesign, Lightroom, Photoshop Other LaTeX, Linux (Ubuntu, OpenSUSE, Redhat, Gentoo) Languages Chinese (native), English (fluent), German (intermediate) Hobbies Calligraphy (National Silver Medal), Watercolor, Photography, Singing (Yale Glee Club, Collegium Musicum, Yale Opera Chorus, Yale Baroque Opera Project, Christ Church New Haven, Church of the Advent, Christ Church Cambridge) | |