William Luo Qian

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EDUCATION

Harvard University School of Engineering and Applied Sciences (SEAS) — **Cambridge, MA**
⋄ PhD in Computer Science (Conferred May 2023)
⋄ Thesis title: *Workload Adaptations for Contended Main-Memory Multicore Transactions*
⋄ Advisor: Dr. Eddie Kohler (kohler@seas.harvard.edu)

Massachusetts Institute of Technology (MIT) — **Cambridge, MA** — *GPA: 5.0/5.0*
⋄ MEng in Electrical Engineering and Computer Science (Conferred Sep 2016)
⋄ Thesis title: *AuO: Audio Recorder and Editor on the Web*
⋄ Thesis supervisor: Dr. Eric Klopfer (klopfer@mit.edu)

Massachusetts Institute of Technology (MIT) — **Cambridge, MA** — *GPA: 4.5/5.0*
⋄ SB in Computer Science and Engineering, Mathematics (Conferred Jun 2016)

Thomas Jefferson High School for Science and Technology (TJHSST) — **Alexandria, VA**
⋄ Graduated Jun 2012

SKILLS

Programming: C, C++, Java, Python3, shell scripting (e.g. BASH), Julia
Web Development: PHP, Django, HTML5, CSS3, JS (ES6), SVG, SQL
Parallel Computing MPI, OpenMP, POSIX threads (`pthreads.h`), OpenCL, CUDA, CILK+, FaaS
Typesetting and Mathematics LaTeX, Asymptote, Mathematica, MATLAB
Working in Linux and other UNIX-like environments

WORK EXPERIENCE

Software Engineer at MongoDB — **Jun 2023 to present**
⋄ Query Optimization team ⋄ Analyze and improve performance ⋄ Work on the query optimizer

Research Developer at One R Squared — **Dec 2022 to Apr 2023**
⋄ Improved backend infrastructure ⋄ Developed risk-related tooling ⋄ Implement spreads trading features

Software Engineer at Gem — **Aug 2022 to Nov 2022**
⋄ Talent Discovery team ⋄ Improved the search index ⋄ Overhauled new hire setup process

Software Engineering Intern at Google — **May 2019 to Aug 2019**
⋄ SQL Pipline team in Data Infra & Analysis ⋄ Helped design streaming differential privacy features

Software Engineer in Telecom Infra Project at Facebook — **Aug 2016 to Sep 2017**
⋄ Worked on an OpenCellular-related project in the Boston office

Software Engineering Intern at Google — **Jun 2015 to Aug 2015**
⋄ Google Cloud Dataflow SDK team ⋄ Developed feature prototype for batch jobs

Software Engineering Intern at Quora — **Jun 2014 to Aug 2014**
⋄ Worked in user growth team on several projects for a better new user experience

TJ IOI

Thomas Jefferson Invitational Open in Informatics (TJ IOI) — **Sep 2011 to Apr 2012**
⋄ Created a CS competition for local middle and high school students in the Northern Virginia area
⋄ First Chief Executive Officer, responsible for overall and day-of logistics, and external-facing interactions
⋄ Current website: https://activities.tjhsst.edu/tjioi

AWARDS

46th Conference on Very Large Databases (VLDB) Best Paper — **Sep 2020**
⋄ Best paper award: *Opportunities for Optimism in Contended Main-Memory Multicore Transactions*
⋄ Co-authored paper with collaborators Yihe Huang, Eddie Kohler, Barbara Liskov, Liuba Shrira

EECScon Poster Session — **Apr 2015**
⋄ 3rd place poster: *Concurrent Skip Quadtrees Using Transactional Memory on Intel® Haswell Machines with Transactional Synchronization Extensions*

VOLUNTEERING

President of the American Software Society — **Jul 2023 to present**
⋄ Non-profit for computer literacy ⋄ Run the company's operations ⋄ Research/implement programs

HMMT — **Sep 2015 to Present**
⋄ Currently in advisory and software roles ⋄ Served in many roles, mostly advisory, in the past