

I'm a self-taught full-stack developer with more than 8 years of experience in programming, especially web applications, and I've run three academic competitions and worked in two fledgling startups. I'm also doing research projects in machine learning and network meta-analysis.

Citizenship USA/Canada Dual Born October 1998 Languages English, native fluency; Mandarin, basic fluency

Academics

University of Waterloo Software Engineering, Co-op: 2016-2021

Lexington High School (Lexington, MA): 2012-2016

AP Scores 5 on Calculus AB & BC, Biology, Chemistry, Physics C Mechanics & E&M, Computer

Science, Statistics, and Macro/Micro Economics; National AP Scholar

National Merit Scholarship Finalist

Supplementary Courses Multivariable Calculus & Linear Algebra at Harvard Extension School, gr. 10

Coursera Machine Learning, gr. 10-12

National Science Competitions

USA Computing Olympiad Platinum League **USA Chemistry Olympiad** 2x School Finalist

USA Physics Olympiad Silver Medalist **USA Math Olympiad** AMC 12 School Winner, 5x AIME qualifier

Experience

Notable public projects: clive.io, lexscibowl.org, live.lexhack.org, lhsmath.org, calcbee.org, vocative.github.io

Lines of code: 100,000+ public on GitHub (github.com/cchan)

Work & Research Experience

SkillFlow developer, 2016-present

VitaeDev co-founder, 2016-present

MIT PRIMES researcher, 2016-present

Kumon Teaching Assistant, summers 2014-15 **KTByte** Teaching Assistant, summer 2014

Private C++ instructor summer 2013

Startup based in Palo Alto creating a platform to facilitate live collaboration of software

developers in need of experienced help, using the Slack chat platform.

Lead programmer in student-run startup writing modern websites for Lexington-area

businesses, with free services to nonprofit community organizations. <<u>vitaedev.com</u>>
Performing network meta-analysis of cancer treatments to fairly compare treatment

comparison studies with different parameters and results.

Taught children in math & reading; supervisor of my section of TAs.

Helped students learn Processing & build their own interactive projects.

Taught basics of C++ programming to elementary school students.

Web Development Languages/Technologies

italics indicates particular expertise

General: Git & GitHub, Bash, DOS Batch, FDD, BDD, Travis CI Research: C/C++ with Make, Java with Maven, Python, NumPy, TensorFlow, Octave/MATLAB, R, LaTeX Web Frontend: HTML5, CSS3 (with Sass), JavaScript, JQuery, AngularJS, ReactJS, Socket.IO, Firebase Apache Webserver: PHP, MySQL NodeJS Webserver: Express, CoffeeScript, Gulp, NoSQL Networking: SSH, Nmap Linux Server Admin: Amazon EC2, DNS, SSL, RedHat OpenShift, CloudFlare IDE: Notepad++, Atom, Visual Studio, Android Studio, Eclipse Other: RESTful APIs, GPG, Raspberry Pi, Arduino

Leadership

FIRST Robotics

LexHack high school hackathon, Co-Founder & Co-Director gr. 11-12 (<u>lexhack.org</u>)

OpenSource town grant-funded High School MakerSpace, Co-Founder & Co-Director gr. 11-12

FIRST Tech Challenge Team, Research & Development Lead gr. 11-12

Science Bowl

LexSciBowl middle school science contest, Founder & Co-Director gr. 11-12 (<u>lexscibowl.org</u>)

National Science Bowl Team Co-Captain & team 4th place nationally gr. 12

Math Team

Lexington Math Tournament middle school math competition, Director gr. 11-12 (Ihsmath.org/LMT)

Math Team Co-Captain gr. 11-12

Webmaster, gr. 10-12 (github.com/chan/lhsmath.org)