

Self-taught full-stack programmer. 8+ years of experience. Passionate about machine learning and STEM outreach.

Citizenship USA/Canada Dual

LinkedIn <a href="mailto:linkedin.com/in/cchan3141">linkedin.com/in/cchan3141</a>

Phone (857) 302-2426

## **EXPERIENCE & SKILLS**

Lines of code: 120,000+ public on GitHub < github.com/cchan>

## **Work & Research Experience**

VitaeDev co-founder & lead developer,

2016-present ealth Mode company) software engineer

2016-present

MIT PRIMES researcher, 2016-present

**KTByte** Teaching Assistant, summer 2014

Lead developer in startup writing modern websites for Lexington-area businesses. Free services to nonprofit community organizations. <<u>vitaedev.com</u>>

**(Stealth Mode company)** software engineer, Startup headquartered in California where I work on a NodeJS application with a global team using modern development processes and paradigms. (Under NDA)

Network meta-analysis of cancer treatments to fairly compare treatment comparison studies with different parameters and results.

Helped students learn Processing/Java & build their own interactive projects.

# **Web Development Languages & Technologies**

\*bold indicates particular expertise

General: Git & GitHub, Bash, DOS Batch, FDD, BDD, CI, Code Review 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, PHPMyAdmin NodeJS Webserver: NodeJS, Express, CoffeeScript, Gulp, NoSQL Linux Server Admin: Amazon EC2, DNS, SSL, Networking, HTTP(S), SSH, Curl, RedHat OpenShift, CloudFlare Other: RESTful APIs, Google Analytics, GPG, Raspberry Pi, Arduino, Verilog

## **Selected Projects**

<u>vocative.github.io</u> <u>calcbee.org</u> <u>npmjs.com/package/mindelay</u> <u>github.com/cchan/cppNN</u> <u>github.com/cchan/ec2</u> *Additionally, I have created or contributed to all linked <websites> on this page, other than LinkedIn.* 

### **LEADERSHIP**

### **FIRST Robotics**

**LexHack** 12hr high school hackathon, co-founder & co-director, gr. 11 & 12 <lexhack.org> lexhack.org> lexhack.org>

**OpenSource** town-grant-funded high school MakerSpace, co-founder and co-director, gr. 11 & 12

**FIRST Tech Challenge Team**, research and development lead, gr. 11 & 12; 4x World Championship qualifier

#### Science Bowl

**LexSciBowl** middle school science contest, founder and director, gr. 11 & 12 < lexscibowl.org>

**Lexington High School Science Bowl Team** co-captain in gr. 12; physics & math specialist; earned 4th place nationally

**Diamond Middle School Science Bowl Team** co-coordinator, gr. 11

## **Math Team**

**Lexington Math Tournament** middle school math competition, director, gr. 11 & 12 < lhsmath.org/LMT>

 $\begin{tabular}{ll} \textbf{Math Team} & co-captain of 1st place team in both MA and New England math leagues, \\ gr. 11 & 12 \end{tabular}$ 

**Webmaster** of 70k+ LOC PHP gr. 10-12 < <u>github.com/cchan/lhsmath.orq</u>>

## **ACADEMICS**

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

**2016** Carl A. Pollock Engineering Scholarship, University of Waterloo President's Scholarship

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

SAT 2360 SAT (superscored); 240 PSAT; 800 SAT II Math I & II, Chemistry, Physics

**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 and Linear Algebra at Harvard Extension School, gr. 10

Coursera Machine Learning, gr. 10-12

**Individual Science Awards** 

**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 gualifier