

aclive.io

**⊆** cc@clive.io

**O** cchan

**in** cchan3141

Coder for 8+ years. Proficient in 10+ programming languages. 1200+ commits per year on GitHub, accumulating 100,000+ lines of code.

Hackathon **founder**, academic **contest coordinator x2**, science and math **award winner x4**.

## TECHNICAL SKILLS -

**Native speaker:** C/C++, Git, NodeJS, HTML5, CSS3, JavaScript (ES6+), PHP

**Conversationally fluent:** Java, Python, Matlab, SQL, jQuery, AngularJS, Web infrastructure **Curious tourist:** Amazon EC2, NoSQL, Make, Docker, Travis CI, ReactJS, R, TensorFlow

# **ACADEMICS**

University of Waterloo, Bachelor of Software Engineering, Co-op: 2016-2021 Fall 2016 Carl A. Pollock Engineering Scholarship, President's Scholarship Elected Software Engineering Academic Rep

Lexington High School 2012-2016 GPA 3.77
Harvard Extension School Multivariable
Calculus & Linear Algebra, grade 10
National AP Scholar 5s on ten AP exams
National Merit Scholarship Finalist

### **AWARDS**

US Computing Olympiad Platinum League US Math Olympiad AMC 12 School Winner, 5x AIME qualifier, USAJMO qualifier US Physics Olympiad Silver Medalist US Chem Olympiad 2x School Finalist

## **ACTIVITIES**

Waterloop Embedded & Website Teams

UW Robotics Team Embedded Software Team

OpenSource MakerSpace Cofounded and ran a

MakerSpace after winning \$5000 town grant.

Lexington Science Bowl Team Co-captain and
math/ physics specialist; 4th place nationally.

FIRST Tech Challenge 4x World Championship
qualifier; led coding R&D and STEM outreach.

Lexington Math Team Co-captain; 1st place in
New England and Massachusetts leagues.

## **EXPERIENCE** -

# SkillFlow **3** software engineer

Jul 2016 - present

- Peak 1000+ concurrent users; 100+ downloads of open-sourced parts.
- Gained familiarity with Git workflows, NodeJS design paradigms, SQL
   NoSQL, and writing thorough docs and integration tests.

## VitaeDev **②** co-founder

Apr 2016 – present

- Led a team of students coding free websites for nonprofits.
- Mentored team members in LAMP stack development.

#### Clive.IO @ freelance web developer

Jun 2014 – present

 Solicited multiple volunteer and paid webdev jobs, from a nonprofit's website to a full custom CMS for a local tech education business.

# MIT PRIMES computational analysis researcher Feb – Jun 2016

• Worked on a long-term computational research project, with guidance from an MIT professor and several Master's/PhD students.

# PROJECTS -

# Second Harvest HungerSquad API O

Oct 2016 – present

• Wrote the REST API underlying a system making on-demand match-and-dispatch possible between food donors and volunteers.

## Sandwich-O-Matic @ ECHacks O

Nov 2016 – present

• Best Hardware Hack; I wrote the backend with voice recognition APIs.

#### C++ Neural Networks 🔿

Jul 2014 - present

• Neural network & matrix math library built from scratch. Used for a predator-prey simulation using genetic algorithms and backprop.

#### Vocative O

Dec 2015 – present

- Chat platform using AngularJS, Firebase, and Material Design.
- Used to teach English class and to coordinate LexSciBowl 2016.

#### EC2 Server Suite O

Feb 2016 - present

• Automatic server & domain maintenance tools in NodeJS and Bash.

## Lexington Math Team Website O

May 2013 – present

• Maintained and refactored large existing codebase, coordinating team logistics and the annual Lexington Math Tournament.

## LEADERSHIP

## **Tech Tuesdays** *② founder*

Oct 2016 - present

• Organized and hosted ongoing weekly series of student-delivered technology talks at the University of Waterloo.

#### **LexHack ②** *co-founder* & *co-director*

Fall 2014-201

• Directed outreach initiatives for the first high school-run hackathon in MA, with 70+ participants and \$1000+ in prizes and swaq annually.

### **LexSciBowl ②** *founder* & *co-director*

**Spring 2015-2016** 

• Conceived and directed all aspects of the first student-run science bowl in New England, with 70+ participants every year.

# Lexington Math Tournament **②** *director* Spring 2014-2016

• Handled logistics, outreach, and tech for the largest high school student-run math competition in MA, with 150+ competitors annually.