



CLIVE A. CHAN

1A UWaterloo Software Engineering '21

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Coding for **8+** years. Proficient in **10+** programming languages. **1000+** commits per year on GitHub, accumulating **120,000+** lines of code.

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

TECHNICAL SKILLS

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

Conversationally fluent: Java, Python, Matlab, SQL, jQuery, AngularJS, Web infrastructure

Curious tourist: Amazon EC2, NoSQL, Maven, 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

Fall 2016 SoftEng Academic Representative

Lexington High School 2012-2016 **GPA** 3.77

Advanced Courses Harvard Extension School Multivariable Calculus & Linear Algebra in grade 10

National AP Scholar 5s on Calc AB & BC, Bio, Chem, Phys C Mechanics & E&M, CompSci, Stats, Macro/Micro Economics

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, 2x Semifinalist

US Chem Olympiad 2x School Finalist

HIGH SCHOOL ACTIVITIES

OpenSource MakerSpace Cofounded a MakerSpace at LHS, winning \$5000 grant. Managed budget and mentored makers.

Lexington Science Bowl Team Co-captain of 40+ student club. Physics/math specialist; team won 4th place nationally.

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

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

EXPERIENCE

(Stealth Mode startup) software engineer **July 2016 – present**

- Collaborated remotely with primary team in California, using tools like GitHub, Slack, and Asana.
- Gained familiarity with Git workflows, NodeJS design paradigms, SQL and NoSQL databases, and writing thorough docs and unit tests.
- Created two open-source NPM modules, with 100+ downloads/month.
- Currently beta-testing at hackathons, with 1000+ concurrent users.

VitaeDev.com co-founder & chief technology officer **April 2016 – present**

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

Clive.IO Web Services freelance web developer **June 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 **February – June 2016**

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

SELECTED PROJECTS

C++ Neural Networks **July 2014 – present**

- Neural network and matrix math library built from scratch in C++ after Coursera Machine Learning course. Trained predator-prey coevolution simulation using genetic algorithms and backpropagation.

Vocative **December 2015 – present**

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

EC2 Server Suite **February 2016 – present**

- Automatic server maintenance, website hosting, email bounce handling, process management, and more, in NodeJS and Bash.

Lexington Math Team Website **May 2013 – present**

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

LEADERSHIP

LexHack **September 2014, September 2015**

- Co-founder of the first high school-run hackathon in Massachusetts; 80+ participants and \$1k+ in prizes for two years.

LexSciBowl **May 2015, April 2016**

- Founder and director for two years of the first student-run science contest of its kind, with 80+ participants in 2016.

Lexington Math Tournament **April 2014, March 2015, April 2016**

- Director and Tech Czar of the largest student-run middle school math contest in Massachusetts, attracting 150+ participants every year.