

Cole Killian

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Relevant Academic Specifications

College GPA: 4.00 — High School W GPA: 4.86

McGill University:	Intro to Software Systems, Intro to Computer Science, Abstract Algebra 1, Honours Analysis 1
Harvard University:	Multivariable Calculus, Linear Algebra and Differential Equations, Theoretical Physics
Cambridge Rindge and Latin HS:	AP Physics C: Mechanics (5), AP Physics C: Electricity and Magnetism (5)
Bethesda-Chevy Chase HS:	AP Calculus BC (5), AP CS A (5), AP CS Principles (5), AP Statistics (5)

Employment History

Harvard Research Computing: Web and Database Intern - 350+ Hours April - Aug 2019

Developed an interface that enabled clients to view, request, or terminate their storage allocations (previously this was done via email). Designed a relational database model for tracking storage allocations and storage transactions. This made it much easier to bill clients properly. Created a command line interface for interacting with the novel database.

Foundation Medicine: Cytology Smears Bait Set Validation - 40+ Hours Feb - Apr 2019

Used Python to parse a CSV file and graphically compare the results of the T7 bait set with that of the D2 bait set. Synthesized the results in a presentation that summarized the findings. This helped the D2 bait set gain validity.

Aspine: Website and Progressive Web App Development - 120+ Hours Dec 2018 - Present

Developed Aspine.us to revolutionize the user interface for Aspen, a grade checking service, with many new features and improved aesthetics. Aspine is now preferred by over 500 students. Worked with one other student. Specifications: Uses Node JS and html request mimicking to extract students' information and display it nicely in a web app. [Github](#) - [Aspine.us](#)

Peer Partners: Administrator, Developer, and Tutor - 350+ Hours Jan 2016 - Dec 2018

Wrote a text mining program that saves the Peer Partners administration 100 hours a year by automating the parsing of a several thousand-row long google sheet in addition to facilitating the Peer Partners program by pairing those in want of academic assistance and those capable of delivering academic assistance. Designed a website to keep students up to date with their peer partners profiles: bccpeerpartners.com. Tutored high-school students in physics and math during lunch and after school.

Plough and Stars: Social Media Manager - 70+ Hours Nov 2018 - Jan 2019

Manage The Plough and Stars's Instagram, Twitter, website, SEO, publicity, and performance recording. Developed a python script using the Facebook Graph API that would automatically upload Facebook posts to Instagram.

DC Sail: Sailing Instructor - 480+ Hours July 2017 - Aug 2018

Led as a sailing instructor for the Kids Set Sail program. Responsible for the education of six new students each week, teaching them how to rig and de-rig a sailboat, skipper and crew, tie important knots, and work together effectively.

Awards and Honours

"Straight A" Award, Excellence in Mathematics Award, and Outstanding Achievement in French Award.
Junior Awards Ceremony Recipient of Harvard Book Award.
Member of National Honors Society and Math Honors Society.
Captain of the Winning Central Maryland Physics Olympics Team.
Earned Principal's Honor Roll 27 times.

Extracurricular Activities

FIRST Robotics Controls Team Leader - 150 Hours.
Debate team, Physics Olympics, Boston Physics Circle, CTF Club, and Chess club.
Boston Sailing Center Frostbiting League. Placed first place out of twenty teams.
Made it to regionals as a level 10 artistic gymnast, was on the high school varsity swim & dive team, sailed 4 seasons on the varsity sailing team, and participated in 3 seasons of crew while placing 6th in the Stotesbury Cup.

Hobbies & Interests

Playing guitar and singing in a band, street performing, and managing my guitar cover YouTube channel
Entrepreneurial Programming Projects
Optimizing my workflow (.vimrc, .bashrc, .i3/config)
Going to the gym, cooking, walking, hiking

Programming Languages and Frameworks

Python, Node JS, Javascript, Java, Html, CSS, Bash, R, Plotly, Django

Languages

English (native), French (proficient)