

# Carson Fleming

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cflems@cflems.net · <https://github.com/cflems>

## Work Experience

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Summer 2017	<b>Syapse, Inc.</b> <i>Application Backend Intern</i> Helped build a cloud-based solution to serve health care providers at the cutting edge of precision medicine.	<b>San Francisco, CA</b>
2016-Present	<b>The Exonian</b> <i>Technical Director</i> Manage digital content and expand the website for my school newspaper. Assemble interactive presentations for important articles.	<b>Exeter, NH</b>
2016-Present	<b>Exeter Computing Club</b> <i>Board Member, Instructor</i> Taught a class on the C programming language to a group of interested club members. Promote and organize club activities including Hack Exeter hackathon. Help members to pursue their interests in the field of Computer Science.	<b>Exeter, NH</b>
2016-Present	<b>Bulletin, Inc.</b> <i>Chief Technical Officer</i> Founded a new business with friends. Created an online marketplace connecting teenagers with odd jobs and employment opportunities. Implemented and deployed all necessary software and network infrastructure. Live at <a href="http://bulletinusa.com">bulletinusa.com</a> .	<b>Exeter, NH</b>

## Education

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2014-Present	<b>Phillips Exeter Academy</b> <i>Senior, Highest Honors</i> GPA: 10.4 / 11.0 Courses taken: CSC 505 – Data Structures and Algorithms, 3 x CSC 590 – Selected Topics in Computer Science, Math 411/421/431 Sequence – AP Calculus AB, Math 431/441/451 Sequence – AP Calculus BC, Math 610/620 Sequence – Multivariable Calculus, Spanish 501 Sequence – AP Spanish Language	<b>Exeter, NH</b>
2012-2015	<b>Independent Study / Stanford CS106</b> Completed CSC106 prerequisites and coursework via one-on-one study with a Stanford Ph. D. candidate.	<b>Stanford, CA</b>
Summer 2012	<b>Stanford University</b> <i>Education Program for Gifted Youth – Computer Science</i> Topics included: Graphic Design and Implementation, Robotics	<b>Stanford, CA</b>
2008-2012	<b>Internal Drive Tech Camps</b> <i>Computer Science Summer Programs</i> Topics included: Web Design, Game Design, Algorithms in Java and C	<b>Stanford, CA</b>

## Skills

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### **Static and Dynamic Web Design**

Use HTML, CSS, and JavaScript to create clean and appealing web pages that combine simple structure with sleek stylization.

### **Seamless Data Manipulation**

Use SQL/NoSQL databases and server-side languages such as PHP, Perl, Python, and NodeJS to create fluid interactions between servers and clients. Implement complex algorithms and data structures for maximal efficiency.

### **Independent Application Programming**

Create powerful desktop utilities and games using C/C++, Java, and Python.

### **Multilingual Communication**

Fluent in Spanish at AP level, graduate of immersion program.

## Miscellaneous Projects

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- Combined experience in Java and C to write a secure cross-platform private messenger
- Collaborated with a team of students to design and implement an app which combs the lyrics of a song, album, or playlist and verifies that they are safe for radio
- Developed and maintained a "URL shortener" that makes use of a short domain name and a database of short identifiers which correspond to longer hyperlinks
- Broke down the JSON language and developed a parser suite to interpret and store the information contained in a message
- Created multiplayer game of Battleship which makes use of TCP networking features to connect the two players in C
- Implemented a Java incarnation of the classic arcade game Snake while waiting for a plane to take off
- Built a simple command shell from scratch using Intel x86 Assembly, which translates commands that the user types into programs that execute them
- Developed a browser extension called "GitSum" to verify file checksums using GitHub security keys
- Designed an administration-independent bulletin board software based on the existing popular FluxBB package
- Created a simple, drop-in CAPTCHA package for bot detection, which expects users to read letters off an image

Up-to-date projects are available for showcase at [cflems.net](http://cflems.net)