Terry Chen

Student, Web Developer, Problem Solver.

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Skills

Languages	Python, CoffeeScript, TypeScript, JavaScript, Julia, C++, PHP, Java, SCSS, CSS, HTML
Technologies	React, OAuth 2.0, Jekyll, Webpack, Gulp, pandas, NumPy/SciPy, d3.js, Apache, MySQL
Sysadmin & DevOps	Git, Vagrant, Bash, Zsh, Travis CI, CircleCI, Vim

Project experience

Lead web developer / Markville Computer Science Education Club   June 2017 – June 2018

- Designed, built, and released a Jekyll-based website from scratch that enabled volunteers to easily create, maintain, and manage content with little technical experience.
- Integrated CodeMirror with Remarkable and Asciidoctor.js to build a markup editor featuring live previewing.
- Set up CircleCI to separate asset and content build pipelines and reduce external resource overhead, **increasing client-side performance to the 95th percentile of websites worldwide**.

Web designer and full stack developer / EverythingDojo.com   May 2014 – June 2015

- Worked on initial mockups, user interface, style guide, database, and CMS.
- Modernized back-end APIs in PHP and rebuilt the front-end to be responsive and performant.
- Advised on application security, including vulnerability scanning and penetration testing, overseeing switching to bcrypt for password hashing, and **managing hotfix deployment for zero-day exploits**.

Scheme list visualization / Side Project   October 2018 – Present

- Used React and Webpack to develop an interactive box-and-pointers visualization, with the goal of helping fellow students understand list syntax in Scheme.
- Developed a Scheme parser in TypeScript to enable visualization of arbitrary source code.

Calculation Solitaire / Grade 12 Computer Science Final Project   November 2016 – January 2017

- Implemented the Flux application architecture in a limited subset of Java to streamline data flow, avoid platform performance issues, simplify front-end component design, and reduce code reuse.

Extra-curricular experience

GooseCTF / Member   September 2018 – Present

- Placed 2nd overall in the 2018 Pwn2Win CTF (Capture The Flag security challenge).
- Top-20 U.S.–Canada undergraduate finish in the 2018 CSAW CTF Qualifying Round.
- Specialized in website exploitation and digital forensics.

mathNEWS / Editor   January 2019 – Present

- Acted as point-of-contact for featured professors, involving recruitment and logistical organization.
- Collaborated with the rest of the editorial team in copyediting and publishing issues on a tight schedule.

Awards

Term Dean's Honours List / University of Waterloo   Fall 2018

Math Faculty Entrance Scholarship / University of Waterloo   2018

Education

Candidate for **Honours Bachelor of Computer Science** / University of Waterloo   2018 – Present