

Raymond Cao

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Summary

- **Interests:** Open Source, Web Development, Digital Privacy, Accessibility, Design, Computer Science
- **Keywords:** Discoverer, Organizer, Communicator, Creative, Proactive; Myers-Briggs Type: INFJ

Education

Brown University, Providence, RI | 09/17–to Date

Computer Science Concentration (Sc.B.); Class of 2021

- Courses in artificial intelligence, deep learning, data science, computer vision, algorithms
- Significant experience in Java, JavaScript (ES6+), Python 3, C; Basic proficiency in PHP, C#, and R

Experience / Projects

DataRobot, Columbus, OH | Summer engineering Intern | 05–08/2019, 06–09/2020

- Worked in Explainable AI team
- Reimplemented AngularJS and D3 chart component using React.js and React Hooks
- Integrated UI with Shapley value-based feature impact API, internal PNG export service for D3 charts
- Completed full stack projects for adding explainability support for multiclass models
 - Worked with Python Flask server/API, MongoDB database, React.js UI
 - Added multiclass support for automated compliance documentation generation, feature impact, and feature effects (partial dependence and predicted vs. actual plots)

Buckeye Innovation, New Albany, OH | Summer developer Intern | 06–08/2017, 06–08/2018

- Designed, built, and deployed an internal time-tracking web application for client billing (2017)
- Worked on client projects and revamped time-tracking web app for much better performance (2018)
 - React.js and Bootstrap for user interface and Laravel with Postgres for the server, integrated project management functionality with a Phabricator instance
 - Built data visualization for sprint planning
 - PHP framework Laravel; designed and implemented REST-compliant APIs within PHP app
 - Laravel database migrations, models, and controllers. ECMAScript 6 (ES6)
 - Asynchronous (public and private) API calls within React.js components (see projects)

Brown Political Review (brownpoliticalreview.org), Providence, RI | Lead Web Dev | 09/2018 to date

- Led development of redesigned WordPress website for student publication website
- Worked closely with magazine board and designers and improved loading performance by 10 times
- How: Bootstrap, jQuery, SCSS. Created custom WordPress themes using Advanced Custom Fields, custom shortcodes, Bootstrap (as well as CSS, Less, SCSS), Gravity Forms

Nashoba Learning Group, Providence, RI | Volunteer Developer | Winter Break 2019

- Background: Nashoba Learning Group is an education program for children and adults with autism.
- Developed a scheduler web application around the specific needs and constraints of Nashoba Learning Group (nashobalearninggroup.org). Used jQuery and Bootstrap for user interface, and Java with SQLite for the server. Focused on designing database schema and API for server and UI

Skills/Activities

Teaching/Training:

- Lead Instructor on intro computer science classes for middle school girls through Google IgniteCS
- Teaching Assistant at Brown University teaching bash, git, regex, Python Flask

Brown University Technology House:

- On-campus program housing; elected as treasurer in 2019, manage budget and dues for organization, serve as a bridge between Technology House and Brown's Student Activities Office