

Andre Stackhouse

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Education: University of Washington (UW Seattle 2014): B.S. in Informatics: Human-Computer Interaction (HCI)

Bio

- Over seven years programming experience, four within industry. Creative and ambitious mind. Unflinching ethics.
 - Full-stack web developer with a love of translating human needs and ideas into compelling and user-friendly software systems.
 - Four years industry experience including at education non-profit Code.org. Worked on internal automation tools. Daily deployments.
 - Academic experience as a designer and researcher. Good instincts for human needs, scientific methodology, and UX design.
 - Long history of both team and independent work on tight deadlines (including daily ones).
 - Experience as a teacher, leader and people manager. Confident writer, public speaker, and communicator.
 - Formerly Washington State Champion and world ranked fencer. Member of 2011 bronze medal Open Foil team at US Nationals.
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Skills

- **Expert:** JavaScript/ES6/CoffeeScript/jQuery, C#/ASP.NET, Git/GitHub, HTML/HAML, CSS
 - **Proficient:** SQL/MySQL, React/Redux, Ruby on Rails / ActiveRecord / MiniTest, Sass/Bootstrap
 - **Prior experience:** Node/Express/Mocha, Angular, Python, Bash, VIM, Java, PHP, Sinatra, Optimizely
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Professional Experience

- **Microsoft** (06/2017 – present): SDE II on Bing Growth & Engagement team working on an A/B testing platform for outreach emails.
 - **Fencing Time** (10/2015 – 01/2017): Full-stack development on a membership, ranking, & tournament system in Python & Node.
 - **Code.org** (09/2014 – 10/2015): Front & back end web development in Rails & Sinatra. Built internal automation tools. Ran A/B tests.
 - **Basic Athletic Measurement** (10/2013 – 10-2014): Migration of a .NET website to WordPress including DB design & migration.
 - **Zhurosoft** (Summer 2013): Game development intern. Worked on in-game inventory and menu systems in JavaScript.
 - **Microsoft Research** (Spring 2013): Volunteer research assistant on a Bing academic search prototype.
 - **UW Information School** (Winter 2013): Undergraduate research assistant on HelpGidget.org, a programming education game.
 - **UW Information School** (2012-2013): Teaching assistant for INFO 200. Ran lab sections, graded papers, held office hours.
 - **The UW Daily** (2011-2014): Writer, arts & leisure editor, editor-in-chief. Over 100 articles and video segments produced.
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Projects (personal portfolio: captainstack.github.io/public-stackhouse)

Bing Email Platform Templating System (ASP.NET, C#, Cosmos)

Designed and built a templating system that allowed email HTML to be rendered at runtime by combining a JSON data-model with flexible, reusable, and highly componentized templates. This allowed our platform to run A/B tests on email content as well as personalize down to individual users. The system was built in C# and ASP.NET and integrated into a distributed system (Cosmos) that can send to millions of recipients in approximately an hour. This essential feature enabled our platform to bring on external partners.

Interactive US Map (Sinatra, jQuery)

Built a client-facing promotional US map that would pull information about a state from a database when clicked and present it to the user. Action would also append the state's postal code to the URL. The map was built by extending an open source jQuery plugin. Viewable at: [Code.org/promote](https://code.org/promote).

Operations Dashboard (Rails, Angular)

Designed a system and interface to allow Code.org's operations team manage professional development workshops hosted around the US. The system integrated with our website's users, but also introduced new models like workshops, attendances, and several more specialized user roles/permissions. Back-end was built in Rails as a RESTful web service, while the client was built as part of a Sinatra app with the front-end using AngularJS. This feature saved the operations team a considerable amount of manual work, and also enabled work to be done independently that would have previously required the assistance of an engineer.

Automated email notification system (Ruby, Cron)

Created an email system using ActionMailer that would send automated reminders to workshop attendees. Emails were built dynamically and could change contents considerably based on details about the recipient and workshop. Successfully abstracted significant manual work away from Code.org's operations team.

Stats front-end (Sinatra, SQL, jQuery)

Built an internal tool to display survey information collected from teachers about satisfaction with Code.org workshops through a web interface. Data had previously been pulled into a CSV using a command-line script then pasted into a Google Spreadsheet. Feature removed the need for an engineer in the process and automatically kept stats up-to-date.

Code.org homepage (Optimizely, CSS, JavaScript)

Built several new widgets including a carousel to recognize Code.org donors, and integration with the Indiegogo API to show crowdfunding progress. Designed multiple A/B tests in Optimizely for the Code.org homepage and developed or altered layout and features accordingly.

Chess Scouter (JavaScript, jQuery, CSS)

Designed and implemented a prototype visual chess training tool for undergraduate senior capstone. The tool consisted of a standard web-based chess game that would overlay valuable tactical information directly on the board. The tool was developed in HTML, CSS, JavaScript, and jQuery. The prototype is hosted on GitHub Pages at: CaptainStack.github.io/ChessScouter.