

## **Part 1**

The purpose of my website is to include all the information that is typically on my resume into an interactive website, making the content a lot more interesting. The information that I convey with my website includes my professional internship experiences, the main projects I've completed through courses, and my involvements on campus outside of classes. My design is interactive and engaging primarily through animations, more specifically when selecting pages (small shifts, or change in color) and having the information dynamically fade in when scrolling to view more content, and enlarging/moving options when hovering over specific options. My target audience is possible recruiters, colleagues, and other people who would be interested in getting to know me from a professional standpoint.

## **Part 2**

- Buttons that shift when hovered over with mouse - click 'Anita Cheng' on the top left and on that page, hovering over buttons 'Experiences', 'Academics' and 'Extracurriculars' would cause the buttons to shift
- Click and redirect of pages - clicking on 'Experiences' on the main page or on the navigation bar would bring user to a page with header 'Internships'
- Click and redirect of pages - clicking on 'Academics' on the main page or on the navigation bar would bring user to a page with header 'Projects'
- Click and redirect of pages - clicking on 'Extracurriculars' on the main page or on the navigation bar would bring user to a page with header 'Organizations'
- Information that fades in when scrolling down - click 'Academics' on the navigation bar, scrolling down will cause the information to fade in
- Information that expands when hovered over with mouse - click 'Extracurriculars' on the navigation bar, hovering over each extracurricular will cause the information to scale larger

## **Part 3**

- Name of tool: Web API called the Intersection Observer API
- Why you chose to use it: I chose this tool because I knew that my website would include a lot of textual information. I didn't want to include something too animated as it may be too distracting and would take away from the content. This API is dependent on how much the user scrolls so it ensures that users won't be overwhelmed by too much text/content by only fading the new project in after the user has scrolled down.
- How you used it: I used the API on my 'Academics' page for my projects. As the user scrolls, based on where they are on the page, a project fades in.
- What does it add to your website: It adds to make the experience more interesting and interactive. Instead of normal scrolling through lines and lines of information that's all

already there, this API only shows more information as the user scrolls, allowing the user a break between reading different projects and having them focus more on the project they are on.

## **Part 4**

I iterated on my prototypes by looking at different APIs and Js libraries to see what could be integrated while still keeping the attention mainly on the content. I ended up changing the implementation of my API multiple times because the vision that I had for the interaction and the API's functionality weren't compatible. I had originally wanted the projects page to only show one project at a time and update the picture and information as the user scrolls so that the projects never become cumulative, however after going to office hours, I realized that the API is dependent on how much of the page the user scrolls so my vision of wanting the information to update in the same place was not possible. The changes that I made to my original design included changing the buttons on the main page from circles to rectangles, changing the formatting of the information so that it would be a better balance of text and images. I also simplified some of the pages by excluding certain text-heavy sections and using white space to balance the text heavy parts. I had to also change a lot of the formatting of content for pages for the responsive screen size, mainly shifting information from horizontal/row to vertical/column format.

## **Part 5**

The biggest challenge that I experienced in implementing my website was implementing the Web API; the original vision was for the projects page was for there to only ever be one project showing at once and a new project would replace the old when the user scrolls down. However, because of a misunderstanding of how the API works and a misalignment with my vision, I had to adjust the usage of the API so that information would fade in, based on the assumption that the user would only scroll after they are done viewing the previous project. Another challenge I experienced was how to make my website responsive without renaming all my elements which may be required if I used a framework or preexisting library. I first completed making all the elements based on the first screen size (1200 x 700) and then added the media query and manually added/changed css styles to different elements so that all the content would fit the other screen size (360 x 640).

## Appendix: Screenshots from WAVE

### Main Page

The following apply to the entire page:

**Anita Cheng**

Profile picture

**Hello**

**A Bit About Me**

I'm Anita Cheng a current student studying Information Systems.

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Styles: OFF ON

Summary Details Reference Order Structure Contrast

Errors: 0 Contrast Errors: 0

Alerts: 0 Features: 2

Structural Elements: 4 ARIA: 0

View details

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

The following apply to the entire page:

**Anita Cheng**

Profile picture

**Hello**

**A Bit About Me**

I'm Anita Cheng a current student studying Information Systems.

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Styles: OFF ON

Summary Details Reference Order Structure Contrast

Features: 2

- 1 X Alternative text
- 1 X Language

Structural Elements: 4

- 1 X Heading level 1
- 1 X Heading level 2
- 1 X Navigation
- 1 X Main content

If an icon does not appear within the page, turn off Styles above to view it.

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

### Experience Page

The following apply to the entire page:

**Anita Cheng**

Experiences | Academics | Extracurricular

**Internships**

**Verizon**

**Data Science Intern**

- Created reports on Verizon's cell site availability performance by analyzing 20,000+ rows of outage data
- Conducted analyses through SQL querying in Hue and creating dashboards in Omnisci that were used to observe correlations between outage downtime and frequency and other factors

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Styles: OFF ON

Summary Details Reference Order Structure Contrast

Errors: 0 Contrast Errors: 0

Alerts: 0 Features: 1

Structural Elements: 6 ARIA: 0

View details

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

The following apply to the entire page:

**Anita Cheng**

Experiences | Academics | Extracurricular

**Internships**

**Verizon**

**Data Science Intern**

- Created reports on Verizon's cell site availability performance by analyzing 20,000+ rows of outage data
- Conducted analyses through SQL querying in Hue and creating dashboards in Omnisci that were used to observe correlations between outage downtime and frequency and other factors

If an icon does not appear within the page, turn off Styles above to view it.

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

### Academic Page

The following apply to the entire page:

**Anita Cheng**

Experiences | **Academics** | Extracurricular

**Projects**

**1.2 How to represent block information**

so what we need is a small block at the beginning of each chunk containing the extra-information, also meta-data. This block contains at least a pointer to the next chunk, a flag to mark free blocks and the size of the data of the chunk. Of course, this block of information is before the writer returned by `malloc`.

Figure 3: Heap's Chunks Structures

Diagram illustrating the structure of heap chunks. It shows a sequence of blocks: meta-data, data, meta-data, data, meta-data, data. Arrows labeled 'next' point from the end of one block to the start of the next. Below the diagram, arrows labeled 'pointer' point to the first byte of each meta-data block.

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Styles: OFF ON

Summary Details Reference Order Structure Contrast

Errors: 0 Contrast Errors: 0

Alerts: 0 Features: 4

Structural Elements: 6 ARIA: 0

View details

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

The following apply to the entire page:

**Anita Cheng**

Experiences | **Academics** | Extracurricular

**Projects**

**1.2 How to represent block information**

so what we need is a small block at the beginning of each chunk containing the extra-information, also meta-data. This block contains at least a pointer to the next chunk, a flag to mark free blocks and the size of the data of the chunk. Of course, this block of information is before the writer returned by `malloc`.

Diagram illustrating the structure of heap chunks. It shows a sequence of blocks: meta-data, data, meta-data, data, meta-data, data. Arrows labeled 'next' point from the end of one block to the start of the next. Below the diagram, arrows labeled 'pointer' point to the first byte of each meta-data block.

Figure 3 presents an example of heap organization with meta-data in front of the allocated data. Each chunk of data is composed of meta-data followed by the block of data.

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw

# Extracurricular Page

The following apply to the entire page:

Anita Cheng | Experiences | Academics | Extracurricular

**h1 Organizations**

**h2 Involvements on Campus**

 

**Women in IS**  
Mentee '20 - '21  
Mentor with 3 mentees

The following apply to the entire page:

Anita Cheng | Experiences | Academics | Extracurricular

**h1 Organizations**

**h2 Involvements on Campus**

 

**Women in IS**  
Mentee '20 - '21  
Mentor with 3 mentees from '21 - present

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw →

Styles: OFF ON

Summary Details Reference Order Structure Contrast

Errors: 0 Contrast Errors: 0

Alerts: 0 Features: 4

Structural Elements: 7 ARIA: 0

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

View details

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw →

Styles: OFF ON

Summary Details Reference Order Structure Contrast

4 Features: 3 X Alternative text, 1 X Language

7 Structural Elements: 1 X Heading level 1, 1 X Heading level 2, 3 X Heading level 3, 1 X Navigation, 1 X Main content

powered by WebAIM

Address: https://anitacheng19.github.io/teach-pui-hw →

Styles: OFF ON

Summary Details Reference Order Structure Contrast