

Thomas Cantwell, Software Engineer

New York, NY 10034 | 650-387-5366 | cantwell.tom@gmail.com

thomascantwell.com | [Github](#) | [Blog](#)

TECHNICAL SKILLS

JavaScript | Next.js | React | Redux | Node.js | Ruby | Rails | PHP | Laravel | Rspec | SQL | C++ | HTML | CSS | Photoshop

TECHNICAL PROJECTS

Pixel V - <https://pixelvee.netlify.app/> | [Github](#)

Advanced pixel art drawing app.

- Built functionality around actions which are reversible with an undo/redo stack.
- Made an HSL (Hue, Saturation, Lightness) color picker from scratch for intuitive color selection.
- Implemented tool for creating bezier curves using Bresenham's Algorithm.
- Tech Stack: JavaScript, HTML, CSS

A* Pathfinding Visualizer - <https://astarpathfinder.netlify.app/> | [Github](#)

Pathfinding visualizer to show how A algorithm works with customizable options to enable free experimentation.*

- Implemented a custom map-drawing method and random maze generators using several algorithms.
- Built several types of calculation methods so users can see how they affect the efficiency and nature of the path.
- Designed interface for changing settings to make the program easy to use.
- Tech Stack: JavaScript, HTML, CSS

PixTile - <https://www.pix-tile.com/> | [Github](#) | [Demo](#)

Drawing app to facilitate the design of repeating patterns, applicable to game and textile design.

- Minimized the time complexity of the method for replacing existing colors in the user's design.
- Stored pixel information in hashes to enable more efficient color mapping.
- Created a synchronized 9-grid interface on HTML Canvas that facilitates drawing repeating patterns.
- Implemented user authentication and authorization.
- Tech Stack: React, Redux, Rails, PostgreSQL, Active Record, HTML, CSS

Snail Racing - [Snail Racing App](#) | [Github](#) | [Demo](#)

An interactive app for creating, racing, and betting on snails.

- Designed a custom character creation feature to allow users to create their own snails.
- Created a dynamic race animation based on snails' attributes to ensure race results are always different.
- Implemented user authentication and authorization to allow users to save bets to the database and view winnings.
- Tech Stack: Rails, PostgreSQL, Active Record, HTML, CSS

EXPERIENCE

Future Foundry - Software Engineer

Remote

Web and App development service

05/2021 - Current

- Led frontend development for websites with clients such as BetterBrand and CollegeAidPro
- Built dynamic websites from both frontend and backend
- Restructured inherited legacy code to become more scalable and maintainable
- Worked with team members to meet demanding release schedules in an agile environment
- Created user interface for complex forms
- Designed intricate time-based and scrolling-based CSS animations
- Tech Stack: Next.js, React, Laravel, PostgreSQL, HTML, CSS

EDUCATION

Flatiron School

New York, NY

Full Stack Web Development, Ruby on Rails and JavaScript program

01/ 2020 - 05/2020

Foothill College

Los Altos Hills, CA

Took supplemental courses in math and science

01/2012-06/2013

University of California, Irvine

Irvine, CA

Bachelor of Arts in Studio Art

06/ 2010