

# Emily Bonar

770-696-0159 | [emilykbonar@gmail.com](mailto:emilykbonar@gmail.com) | Austin, TX  
[emilybonar.com](http://emilybonar.com) | [github.com/EmilyBonar](https://github.com/EmilyBonar) | [linkedin.com/in/emilybonar](https://linkedin.com/in/emilybonar)

Seeking a software development role where I can apply extensive engineering and problem-solving skills to difficult challenges

## Skills

**Languages:** JavaScript, HTML/CSS, Python, Java, LabVIEW, MATLAB

**Software:** React, TailwindCSS, Node.js, GitHub

**Certifications:** Certified LabVIEW Developer, Six Sigma White Belt

## Work Experience

**3D Printing LabVIEW Developer – Army Research Lab**, Austin, TX June 2018 – Present

- Developed process tooling and analysis with LabVIEW and MATLAB to increase model development and production through consolidating machine control and monitoring
- Translated 3D models into custom file format for printing using Python scripts

**Materials Scientist – Additive Lab**, Houston, TX May 2017 – May 2018

- Automated analyzing physical characteristics across thousands of photographs with ImageJ

**MATLAB Developer – Thomas Research Group**, Houston, TX February 2016 – January 2017

- Developed instrument control code in MATLAB to improve precision and data collection

## Projects

**Nearest Named Color** - [emilybonar.com/NearestNamedColor/](http://emilybonar.com/NearestNamedColor/) July 2020

- Calculates which of the 140 HTML named colors is closest to any given value in RGB space

**Sourdough Calculator** - [emilybonar.com/Sourdough-Calculator/](http://emilybonar.com/Sourdough-Calculator/) September 2020

- Personalizes bread recipes based on hydration levels of user's sourdough starter
- Uses data attributes to create custom tooltips that work on both desktop and mobile

**TuneTester** - [emilybonar.com/TuneTester/](http://emilybonar.com/TuneTester/) October 2020

- Accesses Spotify REST API using serverless functions to display playlist and song data
- Created as a single-page application in React using reusable, hierarchical components

**LookOutside** – [emilybonar.com/LookOutside/](http://emilybonar.com/LookOutside/) November 2020

- Uses Google Maps, OpenWeather, and Disease.sh REST APIs to create a summary of weather and COVID conditions in a given area of the US
- Built using React and TailwindCSS for the front-end and utilizing serverless functions for API calls

## Education

**Rice University**, Houston, TX Graduated May 2018

BS in Materials Science and Nanoengineering

Co-authored "In situ observations of cracking in constrained sintering" in the Journal of the American Ceramic Society, which earned a "Best Paper of 2018" award from the journal