

# Emma O'Neill

130 Jackson Ave, #2, Redwood City, CA, 94061

[emmaruthoneill@gmail.com](mailto:emmaruthoneill@gmail.com)

<http://emmaruthoneill.com>

206-579-9354

---

## Education

2013 Master of Computational and Mathematical Engineering, Stanford University

2008 Bachelor of Science in Mathematics, Haverford College

---

## Professional Experience

January 2016 – Present

**Interactive Producer, *San Francisco Chronicle*, San Francisco, CA**

- Create interactive web applications that are cross-browser, cross-device compatible
- Work on breaking news, feature stories, landing pages, visual stories, and ground-breaking investigations
- Collaborate with editors, reporters, graphic designers, photographers, and copy editors
- Conceptualize, research, manage, and build projects
- Play an important role in helping the San Francisco Chronicle transition to digital-first content and in creating engaging content that brings readers to the website
- In October of 2017, developed a breaking news map of wine country fires that was a top resource for Bay Area residents tracking the fires
  - Over 307,000 unique visitors
  - Over 24.7 million map views
  - An average of 5 minutes of reader engagement time
- See more examples of my work at [emmaruthoneill.com](http://emmaruthoneill.com)

June 2015 – August 2015

**Digital Interactives Intern, *The Seattle Times*, Seattle, WA**

- Analyzed data for investigative journalism reports
- Created interactive mobile responsive web applications
- See examples of my work at [emmaruthoneill.com](http://emmaruthoneill.com)

2008 – January 2016

**Research Engineer, *Ocean and Space systems group, SRI International*, Menlo Park, CA**

- Participated in and coordinated many field tests, collecting diverse data including radar, lidar, lightning, and drone flight telemetry
  - Wrote numerous interactive GUIs to set instrument parameters and to visualize data
  - Built firmware for astronomical data acquisition systems
  - Implemented many image processing, statistical, and positioning algorithms
  - Parallelized computationally intensive algorithms for real-time computing systems
  - Wrote software and simulations for networking applications
  - Worked on projects with diverse goals ranging from floorplan mapping to tracking moving targets in urban canyons to analyzing UAV energy use to designing more efficient sensors for space-situational awareness to using TDoA delays for geolocation
-

## Scientific Publications

- Stolaroff, Samaras, O'Neill, Lubers, Mitchell, and Ceperley. "Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery," *Nature Communications*, Accepted.
  - Sparr, O'Neill, and Ceperley, "Bayesian Network Processing of Penetrating Radar Scattering for Building Reconstruction," *Military Sensing Symposia Tri-Service Radar Symposium*, Orlando, Florida, 2010.
  - Sharpee, O'Neill, and Slanger. "Astronomical Sky Spectra from the 29-31 October 2003 Geomagnetic Superstorms: Observations of O<sup>+</sup>(2D0-4S0) and Other Emissions," *Journal of Geophysical Research: Space Physics*, 2008.
- 

## Skills

*Languages*: English (Native), French (Proficient)

*Coding*: JavaScript, HTML, CSS, LESS, jQuery, d3, AngularJS, Git, Excel, Leaflet, Mapbox, Matlab, Subversion, LaTeX, R, Python, Mathematica, SQL, Verilog, C++

*Running*: Oakland half marathon 2015, Oakland half marathon 2014, Grape Stomp half marathon 2012, Boston marathon 2011, Kaiser half marathon 2011, Avenue of the Giants marathon 2009



