

Emma O'Neill

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emmaruthoneill.com/portfolio

Education

MS, Institute for Computational & Mathematical Engineering, *Stanford University*

BS, Mathematics, minor in Physics, *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
- Spearhead the *San Francisco Chronicle* transition to digital-first content
- Produce some of the most-read, most engaging projects each year
- 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 25 million map views
 - An average of 5 minutes of reader engagement time

June 2015 – August 2015

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

- Analyzed data for investigative journalism reports
- Created interactive mobile responsive web applications

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
 - Implemented image processing, statistical, positioning, and real-time computing algorithms
 - Built firmware for astronomical data acquisition systems
 - Worked on projects with diverse goals:
 - Tracking moving targets in urban canyons
 - Analyzing UAV energy use
 - Geolocating a sensor using TDoA measurements from lightning strikes
 - Extracting LTE signals (a wireless communication standard)
 - Designing more efficient sensors for space-situational awareness
 - Mapping projected satellite trajectories
 - Recovering telecommunications data transmitted over unreliable channels
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Scientific Publications

- Stolaroff, J.K., C.S Samaras, E.R. O'Neill, A.M. Lubers, A.S. Michell, D.P. Ceperley. "Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery," *Nature Communications*, Accepted.
 - Sparr, R.H., E.R. O'Neill, and D.P. Ceperley. "Bayesian Network Processing of Penetrating Radar Scattering for Building Reconstruction," *Military Sensing Symposia Tri-Service Radar Symposium*, Orlando, Florida, 2010.
 - Sharpee, B.D., E.R. O'Neill, and T.G. Slanger. "Astronomical Sky Spectra from the 29-31 October 2003 Geomagnetic Superstorms: Observations of O⁺(2D0-4S0) and Other Emissions," *Journal of Geophysical Research: Space Physics*, 2008.
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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++

Essential skills: project management, collaboration, prioritization of goals, meeting deadlines, quantitative data analysis, clear and engaging communication of complex subjects

Running: Berkeley half marathon 2017, 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

