Emma O'Neill

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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
- Created interactive web applications that are cross-browser, cross-device compatible
- Worked on breaking news, feature stories, landing pages, visual stories, and ground-breaking investigations
- Collaborated with editors, reporters, graphic designers, photographers, and copy editors
- Conceptualized, researched, managed, and built projects
- Spearheaded the San Francisco Chronicle transition to digital-first content
- Produced 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 24.7 million map views
  - An average of 5 minutes of reader engagement time
- See examples of my work at emmaruthoneill.com/portfolio

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/portfolio

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, positioning, and real-time computing algorithms
- Wrote software and simulations for networking applications
- Worked on projects with diverse goals:
  - Tracking moving targets in urban canyons
  - Analyzing UAV energy use
  - Designing more efficient sensors for space-situational awareness
  - Mapping projected satellite trajectories
  - Recovering telecommunications data transmitted over unreliable channels

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 $O^+(2D0\text{-}4S0)$ 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