

Profile

Senior web application developer. Experienced in architecting, building, deploying, and maintaining websites and web applications. Motivated by beautiful user experience and interaction design.

Skills

Full stack web development, HTML5, CSS, Javascript, jQuery, Python, Django, Flask, Jekyll, Postgres, Redis, MySQL, Wordpress, Git

Work Experience**Web Applications Developer****SETI Institute****Planetary Ring-Moon Systems Node, NASA Planetary Data System**

- * Collaborating with NASA scientists to develop OPUS, a multi-mission search interface for finding planetary spacecraft data and images, a SPA built with Django and jQuery
- * Scripting deployment and data pipelines, architecting procedures to enable rapid deployment of new data releases and calibrated datasets
- * Coded and launched a public API for interacting with OPUS, gave talks on how to use it
- * Maintaining production software and deploying ongoing Planetary Data System (PDS) data releases
- * Various web development projects as needed for Rings Node and with SETI Institute

Web Director**KPFA Pacifica Radio**

- * Coded the web app that drove Pacifica Radio Network's first podcasts and mp3 archives, one of the earliest community radio stations to offer a podcast
- * Collaborated with team to launch KPFA's complete 24/7 audio broadcast to an on-demand internet platform, including browsable web pages and podcast feeds
- * developed workflows to connect on-air pledge gift inventory with the public facing website, allowing the station's listeners to choose pledge gifts when pledging online
- * Worked with community of staff and on-air talent to build a dynamic website promoting ongoing KPFA broadcasts and community events
- * Developed internal and public-facing web applications tailored to integrate with existing workflows and evolving organizational needs

Education**UC Berkeley Extension**

Technical Communication program: Writing and editing, information architecture, user experience, design, code documentation, and project management

San Francisco State University

Bachelors degree in Physics with Concentration in Astronomy

Recent Conference Talks

Slides and past talks are archived here: <https://basilleaf.github.io/talks/>

- * .Astronomy 9, November 2017, Cape Town: "Postcards from the Outer Planets"
- * Strange Loop, September 2017, St. Louis: "How to Play with Deep Space Data"
- * !!Con, May 2017, NYC: "Where Are All the Space Robots?!"

Side Projects

Spaceprob.es - Catalog of all active space probes beyond Earth orbit

- * Collaboration to create the first website to catalog all current active space probes from all countries, with an emphasis on beautiful visual and interaction design. Built using Jekyll for the web front-end and python/Flask for backend web services
- * Created a web service API (Flask) that serves the current distance from Earth to each probe, integrating the Deep Space Network [DNSNow](#) web API and python ephemeris libraries
- * Created a web service API (Flask) that serves latest news stories for each space probe from a list of trusted sites
- * Using open source i18n tools and working with a volunteer translator, refactored the Jekyll site to support multiple languages and launched a Turkish version <http://spaceprob.es/tr/>

Spacehack.org -A directory of ways to participate in space exploration

- * Collaborating with founder/design lead to implement a design refresh in Wordpress, crafting a custom Wordpress plugin to meet design goals
- * Helped port the existing site from Wordpress to Jekyll and implemented a site re-design, including mobile-optimized images and improved accessibility
- * Researching new projects to support content development as needed

Various web scraping projects

usually on the theme of bringing NASA/NOAA images to new audiences

- * [DailyRings.org](#) - Daily image website and twitter feed for images of planetary ring systems, built with Django
 - * [MarsFromSpace.com](#) - self-updating visually-rich display of Mars Reconnaissance Orbiter images built with python and Wordpress
 - * twitter.com/neaacoralbot - Image bot featuring images from the NOAA Coral Kingdom image library
 - * twitter.com/spitzerdaily - Daily image twitter feed for Spitzer Space Telescope images
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