

Christie Koehler

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SUMMARY

I am an experienced, well-rounded software engineer and open source contributor. My technical career spans 15+ years and includes roles in engineering, developer advocacy & marketing, project & product management, technical writing, and training. I have broad, hands-on knowledge of business development and operations, from for-profit to non-profit entities.

My passion is for applying open source tools and methodologies to help organizations create and maintain successful technology products.

TECHNICAL SKILLS & KNOWLEDGE

- Programming Languages: Python, Ruby, JavaScript/Node.js, PHP, MySQL, Bash.
- Programming Frameworks: Django, Flask, Ruby on Rails, jQuery, CodeIgniter, CakePHP.
- Databases, Caching, and Task Systems: MySQL, MariaDB, PostgreSQL, Redis, Memcached, RabbitMQ, Celery.
- Application Frameworks: MediaWiki, WordPress.
- Markup Languages: HTML/CSS, Markdown, reStructuredText, Wikitext.
- Programming Concepts: Object-oriented programming, procedural programming, MVC, RESTful web services, test-driven and Agile development, web standards, localization.
- Development, Testing & Build Tools: Vi(m), Git, Subversion, Make, Docker, Chef, Puppet, Vagrant, VirtualBox, PHPUnit, Xdebug, Valgrind, GDB, strace, New Relic, Virtualenv, Composer, mypy.
- Project Management & Bug Tracking: Bugzilla, Redmine, Trac, Jira, GitHub Issues, Trello, Kanban.
- Operating Systems: macOS, Ubuntu Linux, RHEL, Windows 7 & 10.
- Developer Advocacy & Technical Marketing: Increasing product adoption by developing technical tutorials and talks; teaching workshops; helping individual contributors remotely and in person; developing dashboards and tools as needed to increase contributor productivity and delight; internally advocating for customers.
- Non-profit Management: Strategic planning, fundraising, donor/sponsor relations, marketing and public relations, volunteer management, board development, program creation and development.
- Business Development & Operations: Writing and executing business and financial plans, incorporating and maintaining tax filings, strategic partnership development, coaching and leadership development. Open source governance and business (sustainability) models.

EXPERIENCE & ACCOMPLISHMENTS

Software Engineering & Technical Writing

NUMFOCUS (REMOTE FROM PORTLAND, OR)

Projects Director

February 2017 – March 2018

NumFOCUS is a US-based non-profit whose mission is to promote high-quality, reproducible scientific research by supporting open source scientific computing and data science projects. Member projects include Jupyter, NumPy, and pandas. I led their Open Source Sustainability program.

In addition to my non-technical duties (see “Business Development & Operations”), I also:

- Implemented an organization-wide donor management system (Little Green Light) giving NumFOCUS its first high-level, centralized insights into its revenue stream and donor relationships. Implementation involved processing donor and revenue data from 5 years worth of operations and multiple different sources using a custom toolset I wrote in Python 3. On-going imports and other integrations are managed with this same toolset.
- Deployed and maintained a number of web services using Chef and the Digital Ocean Python SDK, including: the NumFOCUS Community Wiki at wiki.numfocus.org (powered by MediaWiki), Etherpad Lite, discourse.numfocus.org (powered by Discourse), and chat.numfocus.org (powered by Zulip).

KANDRA LABS (REMOTE FROM PORTLAND, OR)

Contract Engineer & Technical Writer

April 2016 – March 2017

- Wrote developer documentation, including: [Setting up the Zulip developer environment](#), the “[Hello World](#)” [webhook integration](#), using [Git and GitHub with Zulip](#), and more.
- Tested and streamlined Zulip developer environment provisioning using Vagrant with VirtualBox (on macOS and Windows hosts) and Vagrant with Linux Containers (on Ubuntu hosts).
- Improved Zulip developer tools and scripts as needed.

MOZILLA CORPORATION (REMOTE FROM PORTLAND, OR)

Lead Developer and Product Manager, MozillaWiki

March 2014 – August 2015

- Led a successful community-driven effort to revitalize Mozilla's [10-year old](#) MediaWiki-powered wiki. This included the halting and cleanup of spam, installing a major version upgrade and default theme change without any significant downtime, and fixing and closing all outstanding security bugs.
- Worked with WebOps team to develop a [git-based deployment model](#) and regular release cycle on Mozilla-hosted infrastructure (Apache with multiple web-heads, MySQL, SSL, front-end caching).
- Developed [ImportFromEtherpad](#) MediaWiki extension using PHP and Pandoc. This extension is used daily by Mozilla staff and volunteers to quickly create pages from Etherpad documents.
- Wrote Python scripts to query MediaWiki API to gather stats for MozillaWiki executive summary.
- Curated MozillaWiki by supporting and training users as well as writing, editing, patrolling, and categorizing pages.

SHOIGNITER, INC (PORTLAND, OR)

Senior Software Engineer

March 2010 – August 2011

- Designed and built features for an enterprise-class SAAS eCommerce application using jQuery and PHP with a highly extended CodeIgniter framework.
- Implemented a robust testing strategy within the existing application structure using PHPUnit and other tools. Integrated Doctrine ORM within the existing application layer.
- Mentored junior engineers in software development best practices.

FINE DESIGN GROUP (PORTLAND, OR)

Senior Web Developer

October 2009 – March 2010

- Developed dynamic websites and custom content management systems for variety of clients, primarily using CakePHP and jQuery. Administered in-house hosting for client websites as well as internal development tools on LAMP stack.

- Worked with Account Managers to define functional requirements for projects.

INDEPENDENT CONTRACTOR (REMOTE FROM PORTLAND, OR & SAN FRANCISCO, CA)

Web Applications Developer July 2007 – March 2010

- Implemented custom eCommerce applications using PayPal and Authorize.net payment gateways.
- Customized several PHP applications including vBulletin, ZenCart, ExpressionEngine and WordPress.
- Maintained and refactored legacy PHP online learning platform guitartricks.com.

Project Management & Developer Advocacy

MOZILLA CORPORATION (REMOTE FROM PORTLAND, OR)

Outreachy Program Champion and Mentor

March 2014 – August 2015

- Helped champion Outreachy (formerly GNOME Outreach Program for Women) by coordinating mentors and interns, advertising the program internally, and advocating for funding.
- Mentored MozillaWiki intern Joelle Fleurantin who successfully completed a MozillaWiki user survey ([video of final presentation](#)), which helped guide a year of product development.

Senior Technical Project Manager, Technical Evangelism

January 2013 – March 2014

- Coordinated the creation and launch of Mozilla's first Developer Phone program, which had a budget of nearly \$1M.
- Implemented a three-part project to help developers localize their open web apps: 1) Localized the Firefox OS Boilerplate app using webL10n library, 2) Wrote developer documentation explaining how to localize apps, and 3) Implemented an easy mechanism for developers to collect localized content for their apps from both volunteer and paid localizers (Transifex).

Senior Technical Project Manager, Web Productions

September 2011 – January 2013

- Provided technical project management for world-class user-facing Django-based websites, applications, and web-based campaigns.
- Projects included: State of Mozilla 2011 report, Mozilla Careers, Firefox Live (a collaboration with Knoxville Zoo), Firefox Flicks, Firefox 3.6 Start Page and De Todos Para Todos.

Business Development & Operations

NUMFOCUS (REMOTE FROM PORTLAND, OR)

Projects Director

February 2017 – March 2018

NumFOCUS is a US-based non-profit whose mission is to promote high-quality, reproducible scientific research by supporting open source scientific computing and data science projects. Member projects include Jupyter, NumPy, and pandas. I led their Open Source Sustainability program.

In addition to my technical accomplishments (see "Software Engineering & Technical Writing"), during my time at NumFOCUS I also:

- Organized and facilitated 2017 Summit and Sustainability workshop using the Future Search Methodology.
- Worked directly with the Executive Director to develop the organization's 2018 strategic plan, including fundraising and staffing.

- Consulted as needed with member projects about specific issues related to sustainability and governance.

AUTHENTIC ENGINE (PORTLAND, OR)

Co-founder and Principal

January 2016 – Present

- Authentic Engine is a consultancy I founded. We help technology companies and open source projects work through challenges related to sustainability, governance, participation, and leadership.
- A client is Sourcefabric, an open source project based in Europe. I worked with their leadership team to develop a governance structure and sustainability plan for their flagship product Superdesk.
- Another client is Zulip, an open source group chat product similar to Slack. I helped to improve their new contributor on-boarding materials and experience.

STUMPTOWN SYNDICATE (PORTLAND, OR)

Co-founder and Volunteer Board Member

December 2010 – December 2016

- The mission of Stumptown Syndicate, a 501(c)(3), is to bring tech and maker skills to communities in ways that enable positive social change. We do this primarily through organizing educational events, hosting open source projects such as Calagator, and by creating re-useable community resources such as the Citizen Code of Conduct and the “user group in a box.”
- I am co-founder of the Syndicate and co-managed daily operations from 2010 through 2016, serving in all three board positions: Secretary, Treasurer and President. The Syndicate has an annual budget of approximately \$150k.
- My duties have included: fundraising, creating and maintaining governance policies, strategic planning, volunteer coordination and many areas of program work, including oversight of our events.
- Current events include: Open Source Bridge, WhereCamp PDX, IgnitePortland, and BarCamp Portland.

OPEN SOURCE BRIDGE CONFERENCE (PORTLAND, OR)

Co-Chair, Project Manager and Volunteer Coordinator

May 2009 – June 2016

- Open Source Bridge is the conference for open source citizens. Its content spans multiple platforms, languages and technologies. The number of participants varies, but is between 400-500. The conference is run entirely with volunteers. It has an annual budget of approx \$100k.
- I have been involved with the conference since it started in 2009, when I was a speaker and volunteer coordinator, and served as co-chair from 2011 to 2015. In 2016 I served as co-chair emeritus and successfully on-boarded a new leadership team.
- My duties have included: fundraising, marketing, content coordination, logistics, project management, team leadership, succession planning.

LEGION OF TECH (PORTLAND, OR)

Volunteer Board Member and Treasurer

January 2010 – December 2012

- Legion of Tech is a 501(c)(6) trade association whose mission is to foster and sustain the greater Portland tech community through free and affordable peer-driven educational events, social activities, and other outreach.
- As Treasurer, I kept full and accurate accounts of all financial records for the organization, managed deposits and disbursements as appropriate, and made regular financial reports to the board of directors.
- Additionally, as board member, I helped to plan and execute short- and long-term fundraising, marketing and volunteer recruitment plans.

BARCAMP PORTLAND (PORTLAND, OR)

Volunteer and Co-Chair

May 2009 – December 2016

- BarCamp is an annual weekend unconference. Portland's BarCamp draws its audience of 300-400 from a range of local geek communities: hackers, artists, makers, bikers, farmers, and more. I've been involved with BarCamp since 2009 and have been co-chair since 2010.
- As co-chair, I have been responsible for: fundraising, project management, volunteer recruitment and coordination, logistics, and more.

WOMEN WHO HACK (PORTLAND, OR)

Lead Organizer

April 2010 – December 2016

Women Who Hack is a user group for women working in technology. I lead the group, resourcing appropriate space for each meeting, developing a program schedule, recruiting speakers, and advertising the monthly meetings.

Speaking & Writing

PODCASTING

Recompiler Podcast, Host and Producer

February 2016 – Present

The [Recompiler Podcast](#) is an adjunct to the *Recompiler* feminist hacker magazine, which publishes in print and online. Our goal is to help people learn about technology in a fun, playful way, and highlight a diverse range of backgrounds and experiences. As host and producer, I plan content, source and interview guests, and oversee production of each episode.

"In Beta" Co-host

January – December 2014

In Beta was a talk show about tech culture, making open source software, and how mobile, social, and web apps are changing the world. Co-host Kevin and I planned and developed content for shows together.

Sample shows:

- "[Episode 96: A Series of Mathy Things](#)," where I explain the Heartbleed SSL vulnerability.
- "[Episode 102: A Three-Act DRM Drama](#)," where I explain encrypted media extensions.

SELECTED SPEAKING EXPERIENCE

ScyPy 2017 (Austin, TX)

July 2017

Gave a 5-minute lightning talk about measuring open source sustainability.

Open Source and Feelings (Seattle, WA)

July 2016

Open Source & Feelings is community-focused conference about the intersection between software and the humanities. I presented "When the Worst Happens: Moving Forward After the Unexpected Death of a Core Organizer" ([video](#), [text and slides](#)).

WikiConference USA (New York, NY), Keynote Speaker

June 2014

Delivered a keynote at the first conference for the United States regional Wikimedia community.

OSCON (Portland, OR)

"Community Event Planning" Workshop

July 2011, July 2012, July 2013

OSCON is O'Reilly's annual Open Source Convention. I have co-presented "Community Event Planning" there three times, first as a 45-minute session and then twice as a three-hour workshop.

PyCon (Santa Clara), “Community Event Planning”

March 2013

PyCon is the annual conference of the North American Python community.

OSCON (Portland, OR)

“Tools for Spelunking a New-to-You Codebase” Talk

July 2011

In this talk I introduce a handful of useful PHP code analysis tools, including: phpincluded, Xdebug, phploc, phpdocumentor, PHP_CodeSniffer, and the Reflection class.

SELECTED WRITING EXPERIENCE

Community Event Planning

2013

Co-author of [Community Event Planning](#), a handbook for event organizers available on Leanpub.

Subfictional Studios

September 2008 – Present

This is my personal blog, which includes writing about technical topics.

Sample posts:

- [An explanation of the heartbleed bug for regular people](#)
- [Fun with git submodules](#)
- [Python's os.fork, subprocess, and the case of the missing output](#)

EDUCATION, ASSOCIATIONS, AWARDS

- BA, English, UC Davis, Davis, CA (Regents Scholar and Outstanding Graduating Senior)
- Various computer science courses, Sacramento State University and Portland State University
- Non-profit management training with Financial Stewardship Resources, Inc.
- Software Carpentry instructor training, UC Davis, 2015
- O'Reilly Open Source Award, 2012