

HOW TO CONTRIBUTE TO OPEN SOURCE

**What maintaining a project with
280 million+ downloads taught me**

Nate Berkopec for Tokyo Tech Meetup, Feb 2023



Midjourney: "A cybernetic puma cat, growling"



Puma: A Ruby Web Server Built For Parallelism

Tests failing maintainability C stackoverflow Puma

Puma is a simple, fast, multi-threaded, and highly parallel HTTP 1.1 server for Ruby/Rack applications.

Built For Speed & Parallelism

Puma processes requests using a C-optimized Rake extension (inherited from Mongrel) that provides fast, accurate HTTP 1.1 protocol parsing in a portable way. Puma then serves the request using a thread pool. Each request is served in a separate thread, so truly parallel Ruby implementations (JRuby, Rubinius) will use all available CPU cores.

Originally designed as a server for [Rubinius](#), Puma also works well with Ruby (MRI) and JRuby.

On MRI, there is a Global VM Lock (GVL) that ensures only one thread can run Ruby code at a time. But if you're doing a lot of blocking IO (such as HTTP calls to external APIs like Twitter), Puma still improves MRI's throughput by allowing IO waiting to be done in parallel.

TOTAL DOWNLOADS

260,830,673

FOR THIS VERSION

1,165,330



Midjourney: "An army of nerds with laptops"

Open source
contribution is
an excellent way
to learn, usually
from principal-
level engineers



Midjourney: "16-bit puma cat video game character sprite"



Midjourney: "cybernetic uncle sam, pointing at camera, "i want you" poster, tron, futuristic, cyborg, android --



A project you should contribute to will:

1. Have regular releases (every 2-3 months)
2. Actively seek new contributors (how many do they have?)
3. Be something you already use every week

CONTRIBUTING.md

Midjourney: "an anthropomorphic puma cat, "we can do it!" poster"



Get the test suite working and passing

1. `git clone`
2. `brew install fancy-stuff`
3. `bundle exec rake`

Get a local version running

```
bundle exec bin/puma test/rackup/hello.ru  
gem "puma", path: "/path/to/local/puma"
```

Midjourney: "a clockwork puma cat, clockwork mechanism, complicated, highly detailed"

Don't "claim" issues.
Post draft PRs instead.



Midjourney: "a lazy puma cat, kawaii, cute, anime style, bright color background, simple drawing"

It's not just
about pushing
new code.



Midjourney: "a puma cat cartoon character, chibi, kawaii, cute, sanrio style, low detail, anime, hacker, computers, programmer"

Clarifying the “next action” in an issue or PR is often more helpful than actually coding.



Midjourney: “jumping puma cat, cute, kawaii, anime style, simple cartoon, anthropomorphic, low detail, happy, mouth open, sanrio style

contrib-wanted label



Midjourney: "a puma cat cartoon character coding at a laptop, kawaii, cute, sanrio style, low detail, hacker, anime --v 4"

needs-repro label



docs label



Midjourney: "a puma cartoon character, dressed as a librarian, cute, kawaii, low detail, in the style of sanrio, books"

Code review isn't just for “maintainers”



Midjourney: “a sleepy puma, lazy, cartoon style, cute, kawaii, anime, anthropomorphic, low detail”

You can fix bugs or
backport bug fixes
and features.



Midjourney: "a puma cat cartoon character, chibi, kawaii, cute, sanrio style, low detail, anime"

Finally: features.



Midjourney: "a puma drawn in the style of Yoji Shinkawa"

To start contributing to open source:

1. Don't worry about how much you know. You can learn while you contribute!
2. Pick the right project for you
3. Start contributing by:
 1. Reproducing bugs
 2. Adding documentation
 3. Reviewing PRs
 4. Fixing bugs, backport
 5. Write new features



speedshop

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