



## Software Engineer

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Does writing code used to make a lifechanging device that could survive in the human body sound awesome to you? What about Neuroscience? Do you want to be a part of the global effort to create the first widespread computer link to the brain (and beat Elon Musk to the punch)?

Do you like problem solving? Not, can-you-make-my-product-look-like-apple-designed-it kind of problem solving, but real-time neural signal decoding, how-do-we-keep-up-with-the-most-exciting-emerging-field-in-biotech, how-do-we-make-really-complex-data-easy-to-understand-kind-of-problem-solving.

Do you like the idea of contributing to an engineering team that has their hearts (and minds and hands) set on radically improving the lives of high-need patients?

Want to work with the coolest gang of engineers ever? Yeah, that's right. We think engineers are pretty cool around here. You can talk through ideas in the office or you can grab some Banh Mi's and discuss the next project.

If you answered yes to these questions, you may have met your match!

We are looking for a skilled, hard-working, driven Software Engineer to join our tight-knit team of experienced professionals to help develop software used to read and write the human nervous system. This is a full-time, salaried position, starting immediately in our Salt Lake City office. This position reports to our engineering technical lead, Steve Barrus.

### About this Position

Here's what we are looking for. If you've got some or all of these under your belt, then you've got the chops:

#### **Required**

- At least 5 years of C++ experience:
  - Modern language standards (C++11 or later)
  - OS level programming (Linux, OSX, or Windows)
  - Low-level sockets programming for high-bandwidth network communication
  - Threading constructs and multi-threaded application development
- Experience with electronic testing equipment (scopes, signal generators, etc.)
- Unit and integration testing experience.
- Deep reserves of grit and optimism. We need someone who doesn't get defeated easily and steps up to challenge after challenge with a positive outlook.
- A problem-solving attitude. It doesn't go over well when you present only problems to someone at Ripple. You've got show us you have thought through potential solutions as well!
- Familiarity with medical device software development standards (IEC 62304, ISO 13485, etc.)

### Preferred

- MATLAB, MEX, and Python 3 experience.
- Experience with Git and Jira (or similar software).
- Experience with embedded systems and firmware.

Here's what you'll do:

- Develop new software (in C++) for Ripple hardware devices.
- Maintain and improve existing software for Ripple's current product line.
- Be a humble badass. What's a humble badass? It's someone who is extremely competent and also kind and open to new information. It's someone who will do excellent work regardless of recognition because the work they are doing matters. We also believe a humble badass understands how complex problems can be, but knows how to tackle them; it is someone who is competent, but also knows there is ALWAYS more to learn.
- Collaborate with electrical and mechanical engineering teams within Ripple during product development lifecycle to ensure successful design specification and project execution.
- Communicate directly with industry and academic partners to manage development needs on joint collaborations and custom projects.
- Learn about neuroscience and Brain Machine Interfaces.
- Documentation – we are in the process of becoming ISO 13485 compliant; this means we will be a certified medical device company.
- Software Verification (basically CI for medical software).
- Software Validation (woah, you might actually get the chance to ask the users what they like/dislike about your software).
- Be thoughtfully constructive: We are looking for solution-oriented team players who can check their egos in order to collaborate to overcome obstacles.
- Have opportunities for skillset growth and increasing technical knowledge.

Here's who you'll do it with:

- Steve and the Software Team including Jay and Greg. You will report all of your successes (and rare but occasional failures) to Steve. This team works in a conducive, collaborative environment where you will feel welcome to share ideas and must be open to receiving feedback.
- Our Electrical and Mechanical Engineering teams. You will work them during product development lifecycle to ensure successful design specification and project execution. These guys are super smart and always willing to come up with the best solution. They may even invite you on their Monday Del Taco runs!
- Our Quality team, this group will help you effectively and efficiently document your work in all the ways required for medical software. This team has a way of teaching us how compliance is valuable, instead of burdensome.

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. We are a team. We pitch in and help each other on all projects if it means it will help us reach our mission. If you are "above" doing certain tasks, Ripple is definitely not a good fit for you.

Ripple is committed to equal employment opportunities, and does not discriminate on the basis of any protected class defined by the Equal Employment Opportunity laws. We view diversity as an opportunity and strength. We are also willing to make reasonable accommodations to enable individuals with disabilities to perform this job.

### About Ripple

Ripple delivers game-changing neurotechnology that greatly advances human health and potential. Our products integrate cutting-edge hardware and software elements designed to read and write from the human nervous system. We are funded by our sales revenue, contract design and engineering business, and grants from NIH and DARPA.

Executing this mission requires smart ideas, amazing people, and lots of hard work. To succeed we strive daily to find the best in ourselves as individuals and endeavor to approach our work together with intention, sincerity, and passion.

At its core, Ripple is a community of driven people who are choosing to work together on really hard problems. We are builders and creators and want to see our efforts impact the world for good. Those who thrive at Ripple are self-motivated and work well independently. There are times of intense effort and individual contribution and sacrifice, but we know that what we are building will take time and living a fulfilling life outside of Ripple will keep team members deeply engaged.

Ripplers are given high-level tasks and a bit of context. Then, they are expected to seek out information, standards, develop new skills and design something great with a team of similarly dedicated and driven colleagues. If you are looking for micromanagement, this is not the place. We encourage individuals to engage in finding solutions to the problems we encounter.

At Ripple, team members are often asked to do things they have never done before. We expect a lot of chances to hear differing opinions, and to be surrounded by people who deeply care about our projects and are interested in the big picture of what Ripple is trying to accomplish. Ripplers are encouraged to take time to help and teach others, and to listen, learn and change their own views until a solution emerges.

We expect great ideas to come from everyone at Ripple. We balance passion and open-mindedness; we strive relentlessly for self-improvement; we own our mistakes and aim to improve, and we all agree to not work with jackasses (no matter how great you think you are). All of us must actively contribute to the quality of our processes and products through thoughtful effort. There is no shortcut to making implantable medical devices or cutting-edge neuroscience tools, but with a strong team building them together, we can do it.

### Next Steps

Does this job posting make you warm and fuzzy inside? Are you already on our website checking the company out and seeing what we do?

Then what are you waiting for? Send your resume on over to [jobs@rppl.com](mailto:jobs@rppl.com) with a cover letter explaining your interest in this position, and in working for Ripple. Tell us why this job posting spoke to you. We are excited to hear from you!