



Software Engineer – Full Stack

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 to build robust, yet very fast software that can handle loads of data in real time?

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. The kind that takes serious long-term effort and dedication to your craft.

Do you want to make a difference in the world today and leave a legacy for humanity tomorrow? 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 friendly, 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, salary position, starting immediately in our Salt Lake City office. This position reports to our Dungeons and Dragons-fanatic, fine whisky drinking, Lead Software Engineer, Robert Roundy.

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:

- 5-10 years of Full Stack web development – this is a must-have. We need a superstar.
 - Websocket programming for high-bandwidth network communication
 - High performance framework for web/mobile graphical applications
 - Familiarity with multiple front end and back end frameworks
 - Threading constructs and multi-threaded application development
 - Python 3
- Unit testing
- UI/Integration testing
- Familiarity integrating with cloud based Electronic Health Record (EHR) systems
- Familiarity with medical device software development standards (IEC 62304, ISO 13485, etc.)
- Familiarity with electronic testing equipment (scopes, signal generators, etc.)

- Familiarity with C++ and desktop GUI framework Qt.
- Non-negotiable: Demonstrable ability to solve complex problems

Here's what you'll do:

- Develop front and back end components of new web/mobile applications to provide API and UI control of Ripple's neural interface hardware
- Help port (and improve!) Ripple's existing desktop software to a web/mobile platform
- 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, so if you're willing to do the work, but not willing to document the work, this is not a good fit.
- 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.
- Genuinely care. At Ripple, we care deeply about each other and treat each other with respect, kindness and patience. We care about the products we create and demand the best of ourselves.
- Believe in Quality! All Riplers are committed to making everything we build or design exceptional by being proactively involved in the quality process.
- Have opportunities for skillset growth and increasing technical knowledge

Here's who you'll do it with:

- Rob and the Software Team including Ali, Cigy, and Greg. You will report all of your successes (and rare but occasional failures) to Rob. 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 will even invite you on their Monday Del Taco runs!
- Our Quality team, this group will help you document your work in all the ways required for medical software.

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 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. Yeah, I know. You've heard it a million times, but we really do mean it. We find value in a diverse workplace. We are

totally willing to make reasonable accommodations to enable individuals with disabilities to perform this job.

About Ripple

Ripple creates life enhancing neurotechnology for research and medical applications. 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 and grants from NIH, DARPA, and the Congressionally Directed Medical Research Program (*sigh* that was a mouthful.)

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.

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 are passionate and friendly, patient and thoughtful, and 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 of friends building them together, it is worth it.

What do you think?

Are you into it? Does this job posting make you warm and fuzzy inside? Are you already on our website checking out our products to see what you can do to make them even better?

Then what are you waiting for? Send your resume on over to jobs@rppl.com with a cover letter explaining your interest in this position, and in working for Ripple.

We are excited to hear from you!