

Staff RF Engineer

The Basics

- This is a full-time position for a current vacancy.
- We'll ask you to spend at least 2 days per week in our downtown Toronto office with some variation based on project needs.
- Work hours are flexible, but meetings are typically scheduled between 9 am and 5 pm Eastern Standard Time.
- The salary range for this position is \$175,000 \$195,000 CAD.
- The hiring manager for this position is Patryk Laskowski, and you can see his Linkedin profile here.

In this role, we'll expect you to:

- Own critical RF initiatives at Synex, including efforts to push the boundaries of coil efficiency and sensitivity, from concept and simulation through prototyping and integration.
- Apply advanced electromagnetic theory and RF design principles to NMR coil design, RF filtering, matching networks, shielding, and noise reduction.
- Lead the use of finite-element simulation tools (e.g., COMSOL, HFSS) to design and optimize high-performance, low-loss RF systems.
- Prototype, build, and test coils and circuits, driving iterative design cycles that balance fundamental research with practical engineering trade-offs.
- Collaborate closely with electrical, mechanical, DSP/ML, and NMR scientists to ensure seamless cross-domain integration.

- Drive prioritization of RF initiatives, weighing technical strategy, risk, and long-term product goals.
- Influence technical roadmaps by identifying opportunities for breakthrough improvements in RF efficiency, performance, and reliability.
- Model giving and receiving timely, actionable, and kind feedback in group settings.
- Mentor peers and elevate technical decision-making within the EE domain, helping to grow future leaders.
- Reiterate medium- and long-term company goals to maintain focus, motivation, and resilience during periods of change.
- Guide complex initiatives with strategic value, tackling some of the most technically complex RF design problems facing the company.

You might be right for this role if you:

- A Master's or PhD in Electrical Engineering, Physics, Biomedical Engineering, or a related field with a focus in RF engineering.
- 7+ years of experience in RF design and development, ideally including work on NMR, MRI, or other highly sensitive biomedical RF systems.
- Demonstrated ability to pursue novel approaches to long-standing technical challenges and translate them into practical, reliable product improvements.
- Deep understanding of electromagnetic theory, RF circuit design, and noise/efficiency optimization strategies.
- Proven ability to own and deliver mission-critical RF systems from design through integration into complex products.
- Hands-on experience with simulation tools (e.g., COMSOL, HFSS, CST) and with prototyping, testing, and debugging RF systems.
- Familiarity with PCB and schematic design tools (e.g., Altium) and mechanical integration tools (e.g., SolidWorks).
- Strong track record of driving cross-functional collaboration in multidisciplinary environments.

- The ability to clearly explain complex RF concepts to colleagues across different technical domains.
- Bonus: Experience in regulated medical device development or other constrained product environments.

Additional Details

About Synex Medical

Synex Medical was founded by CEO Ben Nashman in 2017 with a simple yet powerful vision - to provide people with real-time insights into their body's day-to-day functioning.

Since then, we've been on a mission to revolutionize healthcare by making predictive health monitoring the norm. Our compact, non-invasive device, powered by miniaturized magnetic resonance technology, will enable real-time monitoring of critical metabolites such as glucose and lactate and empower individuals to take control of their health.

We're supported by VC firms such as Accomplice and Radical Ventures, and we're headquartered in Toronto, Ontario. We hire employees in both Canada and the United States. In the U.S., most of our employees are located near the Boston area.

We value excellence, ambition, curiosity, accountability, and communication in our workplace culture, and we seek exceptional colleagues who put the team first and deliver outstanding results.

For us, stellar performance matters more than the amount of hours you work. We appreciate self-motivated, self-aware colleagues who act like leaders and embrace the freedom and responsibility of our working environment.

Benefits

We're proud of the benefits package that we offer to employees, and we'll be expanding it further as we grow. It currently includes:

- Health, dental, and vision insurance employee premiums are 100% paid for by Synex
- Flexible time off No annual limits on vacation or sick time, with a 3-week vacation minimum each year
- Parental leave 6 months fully paid leave for birthing, non-birthing, and adoptive parents
- Professional development reimbursement up to \$1,500 each year

Equal Opportunity

We believe that excellence isn't defined solely by qualifications, but also by the potential for growth and meaningful impact. Many highly capable people, especially those who identify as women or gender-nonconforming, may underestimate their abilities.

We encourage you to consider applying for this role if you believe you have the skills, experience, and passion to excel, even if you don't meet every single qualification. To assist you in this process, we recommend closely assessing your alignment with each job requirement rather than relying solely on your overall impression of the job. Your unique background, skills, and experiences could be a key to our success, so please don't let self-doubt hold you back.

And just to make it extra clear - we are an equal-opportunity employer. We value the collaboration of people with diverse ideas, experiences, and points of view. A diverse team makes Synex an exciting and creative place to work, and we welcome individuals from all walks of life.

All of our hiring choices are strictly based on business needs, job qualifications, and individual abilities, rather than any protected characteristics.

If you require accommodations for a disability during the interview process, please fill out our accommodations request form here. Your information will remain confidential and be used solely to determine appropriate accommodations for the interview process.