Title: Staff Engineering Physicist

The Basics

- **Full-time hybrid** position based in **Toronto**.
- Flexible work hours with meetings scheduled between **9 am and 6 pm Eastern Standard Time**.
- Salary range will be shared during the intro call. Review the stages of our interview process on our career page [here](#).
- The hiring manager for this position is **Stephen McFadyen**, Chief Engineer. You can see his Linkedin profile [here](#).

You might be right for this role if you:

- Have a passion for simulation-driven optimization of complex systems
- Understand fundamental FEA principles and best practices, particularly related to magnetic, electromagnetic, and thermal challenges.
- Have experience designing and building high homogeneity magnet assemblies, similar to components of MRI/NMR/Particle Accelerator systems.
- Have advanced skills in modeling physical systems, conducting simulations, and interpreting results to understand tradeoffs.
- Are familiar with processes for calibrating complex hardware and transitioning designs to a manufacturing environment.
- Have mastered MATLAB or Python, particularly as drivers and post-processors for FEA tools and simulations.
- Have a balance of deep understanding of physics, but can offer practical and manufacturable designs meant for the real world.
Know how to set up testing protocols, ensuring that designs meet specified performance criteria and identifying areas for improvement.

Thrive when working closely with cross-functional teams, gathering collective intelligence to solve problems and make the most informed choices.

Can nimbly adapt to new tools, methodologies, or shifts in project objectives.

Deliver both praise and constructive feedback quickly, humbly, and directly, and encourage others to do the same for you.

In this role, you will:

- Use simulation tools to understand and address magnetic, electromagnetic, and thermal challenges associated with the NMR spectrometer design.
- Guide the technical development and manufacturability of the NMR spectrometer's magnet design.
- Develop, optimize, and implement processes for calibration and manufacturing, ensuring consistency and quality in the production of an NMR spectrometer.
- Utilize tools like MATLAB or Python to create and refine models, run simulations, and analyze results to inform design choices and improvements.
- Offer guidance, share expertise, and facilitate collaborative problem-solving sessions to tackle multifaceted problems.
- Regularly update knowledge on advancements in engineering physics, finite element methodologies, and relevant software tools to ensure Synex remains at the forefront of the field.
- Maintain thorough documentation of design processes, analysis results, and design iterations.
- Regularly report on progress, challenges, and proposed solutions to both technical and non-technical stakeholders, modifying delivery based on depth of technical understanding.
Additional Details

About Synex Medical
Synex Medical was founded by CEO Ben Nashman in 2017 with a simple but 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 people 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 determination, curiosity, accountability, and communication in our workplace culture, and we seek exceptional colleagues who put the team first to deliver results.

For us, high performance matters more than the amount of hours you work. We appreciate self-motivated, self-aware people 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 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 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 people 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 private and be used solely to establish appropriate accommodations for the interview process.

Note: We are interested in every qualified candidate who is legally eligible to work in Canada. However, if you're a U.S. citizen, resident, or visa holder interested in taking advantage of Canada's new Digital Nomad program, please let us know.

Apply here: https://careers.synexmedical.com/jobs/3276138-staff-engineering-physicist