



300-136 Market Ave.
Winnipeg, MB R3B 0P4

Computational Engineering Specialist

Winnipeg, MB Canada

CEMWorks is looking to for a **Computational Engineering Specialist** to join our team of talented professionals and to work with cutting-edge techniques for numerical modeling and enjoys solving scientifically challenging problems. CEMWorks provides solutions for accurate electromagnetic simulations to enable technological developments in 5G, new generations of computer chip interconnects and Smart Mobility – including smart cities and autonomous vehicles.

As a member of the engineering team you will write code to test novel and well-established concepts for fast and accurate solution of electromagnetics challenges and participate in code testing/verification/validation, fix software errors and deliver the results of your work as research reports, presentations, and conference papers.

Responsibilities

- Contribute to the development of the software and algorithms for computational electromagnetics
- Design algorithms and test their implementation on practical examples
- Write well-designed, testable computer code
- Prepare software documentation according to company's standards
- Improve general code performance and adapt it to high-performance computing software & hardware architectures
- Deploy software, perform and analyze numerical simulations

Must-have Qualifications

- M.Sc. degree in a quantitative research field (engineering, computational physics, mathematics, computer science, etc.)
- Experience with computer simulations of physical phenomena using numerical methods
- Ability to write C++ code for scientific computing
- Strong math background
- Some exposure to Linux/Unix

Preferred Qualifications

- Ph.D. degree in a quantitative research field
- Fluency in C++ with application to parallel high-performance computing
- Experience with CAD software
- Experience with common algorithms of computational electromagnetics
- Familiarity with 3-D modeling and mesh algorithms

Why CEMWorks

At CEMWorks you will work with some of the sharpest minds and some of the most prestigious, well-known companies in the industry. We pride in having a responsive and supportive work environment, where every team member thrives and is a vital contributor to the company's success. We are committed to maintaining a culture of inclusion, offer a flexible work environment and industry-competitive compensation.

CEMWorks is an Equal Opportunity Employer. We thank all applicants; however, only those qualified for this role will be contacted.



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CEMWorks does not accept unsolicited referrals for vacancies. Any unsolicited referral will become the property of CEMWorks and upon hire, no fee will be owed to the agency, person, or entity.

Apply by email to jobs@cemworks.com