



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

Computational Engineering Specialist at CEMWorks Inc.

Winnipeg, MB Canada

CEMWorks is looking to for a **Computational Engineering Specialist** to join our team of talented professionals and to facilitate the work on current and future projects with the focus on computational electromagnetics. 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.

Writing code to test novel and well-established concepts for fast and accurate solution of electromagnetics challenges will constitute the major part of the job. 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 as a team member on 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++ and object-oriented programming with application to parallel high-performance computing
- Experience with CAD software and common computational geometry algorithms
- Exposure to electromagnetic theory and common algorithms for computational electromagnetics

Why CEMWorks

- Opportunity to join a cutting-edge industry in a growing company in Winnipeg, MB, Canada
- Supportive and flexible work environment
- Competitive compensation

If you are interested in this position and meet the above criteria, please send your resume in confidence directly to jobs@cemworks.com We thank all applicants; however, only those selected for an interview will be contacted.