# Computational Geometry Specialist at CEMWorks Inc.

## Job Overview

CEMWorks is looking for a Computational Geometry Specialist to join our team to facilitate the work on current and future projects focusing on problems in computational geometry.

We enable innovators to deliver transformational products to their customers, by delivering innovative simulation solutions to solve the most complex design challenges for the next generation IoT, autonomous vehicles, and mmWave/5G/6G technologies.

The Computational Geometry Specialist will work with a team of computational scientists to develop novel and well-established concepts for fast and accurate solutions of computational challenges. The new team member is also expected to participate in code review/testing/verification/validation, and fixing software errors.

## Responsibilities

* Develop innovative and novel algorithms for the processing of computational geometry
* Design algorithms and test their implementation on practical examples
* Write well-designed, testable computer code that can be integrated into the existing framework
* Prepare software documentation according to company’s standards
* Improve general code performance and adapt it to high-performance computing software & hardware architectures
* Deploy software in a high-performance environment, perform and analyze numerical simulations

## Qualifications

* Ph.D. degree or equivalent experience in quantitative research field (engineering, computational physics, mathematics, computer science, etc.).
* Experience with algorithms for meshing and geometry
* Knowledge of numerical techniques for computational sciences is a plus
* Fluency in a high-level programming language (C/C++, Python, Fortran). Experience with coding for high-performance computing environment and parallel programming technologies (OpenMP, TBB, MPI, etc.) is an advantage
* Familiarity with general principles of a software development process
* Strong math background, primarily with a focus on linear algebra, computational geometry, differential equations
* The desire to work on cutting-edge techniques for computational physics applied to real-world projects

## 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.

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**