
Job Description for TC Senior Software Engineer**Job Category: Software Engineering:****Location: Russia, Moscow**

Senior Software Engineer for Technical Computing

Do you want to be a research leader driving the parallel revolution in personal and technical computing? Do you want to partner with a set of talented and innovative Software Developers to define how to create cutting edge parallel and distributed mathematic runtimes?

If you answer yes to the above questions, then keep reading..

Microsoft recently announced the Technical Computing initiative to the world:

<http://www.modelingtheworld.com>. We are committed to providing millions of scientists, engineers, and analysts with the computing power and tools they need to speed discovery and spend more time on their work instead of grappling with complicated technology. Workbench Compute Services is a new team within the Technical Computing Group focused on the end-to-end work flow and scalable computation needs of scientists, engineers, financial experts and other domain specialists. We are dedicated to accelerating our customers "time to insight." We are looking for a driven Software Design Engineer in Test who is looking for the challenge of a leadership role on a v1 team, and who enjoys building rich, intuitive user experiences and scalable online services for a new set of customers. Key technologies for this position include Visual Studio, Excel, WPF, and Windows Azure, although due to the fluid nature of a new team, a successful candidate will need to work on many projects throughout the lifetime of the release. Other technologies and products included in our area of focus include compiler tooling, mathematical libraries, Windows Server HPC, parallel computing and other computational and data centric technologies.

The Parallel computing team in the Microsoft Technical Computing organization is actively planning the next wave of concurrency mathematics runtimes, in the next release we shall be heavily investing into scaling our runtime to the cloud and the clusters, and in making general purpose GPU programming much more accessible to a broader set of developers. If you are looking to make a difference in how software impacts people's lives and to be a leader in innovative software, then the Parallel Computing Platform organization is the place for you!

Primary Responsibilities:

You will work in global R&D team and own the end-to-end development of your features. You'll be responsible for development of high quality, highest performance and high reliability software for parallel computation. This will involve designing and developing various mathematics functions, making them work in multicore/multimode environment, developing specialized interfaces and data containers, participate in specialized compiler development, work in research projects to produce

high performance optimization, statistics, image and pattern recognition algorithms, participating in product design, actively communicating with development, Q&A and PM counterparts about critical issues, and being the development champion for your components throughout the project.

But if you thought this is merely development, think again. We want to push, grow and totally leverage your software design and mathematical skills. They are in fact critical for your job. As the first consumers of our concurrency platforms and programming models, you will develop new ways to utilize the concurrency framework, helping us anticipate and identify best practices developers everywhere will use to effectively deliver parallel applications.

Responsibilities for the position include:

- Design and development of parallel mathematical functions
- Accumulate expertise and provide technical guidance for other team players
- Participate in design and code reviews

Qualifications:

- 5+ years in software development
- Strong Mathematical background - familiarity with numerical methods, linear algebra or image/signal processing
- Professional software development in one or more of C++/C#/Fortran/NumPy/SciPy. (the development will be in C++)
- Involvement in at development one full commercial product release cycles.
- Strong Development background and at least 2 years of experience developing complex algorithms.
- Solid object oriented design skills and good understanding of data structures and commonly used algorithms.
- Strong communication skills and ability to work across team/product-unit boundaries.
- Proven ability to deliver results and independently own the end-to-end implementation and testing of a set of product features
- A BS or MS degree in Computer Science, Physics, Mathematics or other related technical discipline.
- Academic or industry experience in financial, scientific, engineering or research role is a plus
- Strong mathematic background and understanding of numerical methods.
- Experience with any parallel programming or administering clusters or virtualized servers
- Ability to travel to US

<http://www.microsoft.com/rus/careers>