



The Performance Experts.

Optimization of parallel and multi-core applications and environments.

➔ *From embedded devices to massively parallel supercomputers.*

Maximize application throughput.

The complexity of today's high-performance and multi-core platforms demands expertise in chip architecture, numerical analysis and parallel programming.

Samara Technology Group (STG) consultants have optimized some of the fastest systems in the world. We have the experience and tools to ensure that you get the maximum application performance from your hardware.

End-to-End Performance Optimization.

★ Analyze. Diagnose.

We can quickly analyze your code and find exactly where and why your performance targets are not being met.

★ Rectify. Deploy.

STG expertise includes: optimization of existing applications; development of optimized numerical primitives and solvers; and development of scalable parallel application frameworks. We can also break through bottlenecks in vendor-provided libraries, or implement entire accelerated math libraries.

Tools, Training and Services.

★ Productivity Management Platform.

STG has developed leading-edge tool technology to automate performance analysis in your workflow. It is as easy-to-use as it is versatile and powerful. With information provided by our toolset, you can optimize your hardware platform for the maximum possible cost/performance.

★ Establish Best Practices.

Our experts can guide your team in establishing best practices for scalable programming, performance analysis and debugging. We also support our tools with a wide range of training options. With a formal workflow for performance development, your organization will be on track to produce higher quality code.

★ Match Your System to Your Needs.

To ensure that your computing environment is matched to your needs, STG services include benchmarking, workload analysis and competitive evaluations.

★ Platform Migration.

We can extend the life-cycle of your critical applications by porting them to parallel platforms.

The Samara Technology Group – Our Services:

- **Performance optimization.**
 - Increase scalability; serial and parallel performance
 - Improve usage of hardware resources, I/O and communications
 - Diagnostic performance reports to break through the limits of your processing pipeline
 - Enhance total system throughput
 - Client application optimization
- **Customized development.**
 - Application porting to new and next generation platforms
 - Optimized library development (math, string, vector, etc.)
 - Parallel and multi-core algorithm design
 - Scalable application frameworks
- **Productivity management.**
 - The Samara Performance Technology Platform is an easy to use, open, industry-proven performance tool suite
 - Automated tracking of application and platform performance across the enterprise
- **Procurement services.**
 - Requirements and workload analysis
 - Competitive evaluation
 - Vendor, platform and marketplace diligence
 - Benchmark porting, execution and tuning
- **Training & technology transfer.**
 - Performance platform tool use
 - Performance analysis and debugging

Senior Staff:

Robert Millstein, Chief Executive Officer

Bob Millstein has served as President and CEO of NEC Laboratories America. He directed software development at Thinking Machines and has been a founder and VP at several start-ups -- Continuum Software, Topical Net, SiCortex. Previously he was an ARPA PI on several major research projects. He holds a Bachelors from MIT.

Jeff Durachta, Director of Consulting Services

Jeff Durachta has served as an independent HPC software and technology consultant to government and industry for over 12 years. He held senior application engineering roles at IBM and SiCortex. He has a PhD in Theoretical Physics from the University of Maryland at College Park.

Phil Mucci, Director of Business Development

Philip Mucci has worked as a senior consultant on high end computer performance for the past 15 years. His clients range from small startups to the universities to the national labs. Most recently, he served as a visiting scientist for the Parallel Dator Centrum at the Royal Institute of Technology in Stockholm, Sweden and a software technology architect and business developer with SiCortex. He is the recipient of the DoE's Top-100 award for his invention and patent of PAPI, the Performance Application Programming Interface, an infrastructure for the pervasive collection of hardware performance data, used in high-end compute centers worldwide.

Emery Davis, Director of Numerical Algorithms

A numerical algorithm performance and optimization specialist, Emery Davis has served as an independent consultant to the industry for over 20 years. His clients include EADS, HP, SGI, KLA-Tencor, SiCortex and Sky Computers among others. He has a Bachelors in Physics from Boston University.

Tushar Mohan, Director of IT and Software

Tushar Mohan has held applications engineering and software development roles at IBM Research and SiCortex. He has analyzed application performance at Lawrence Berkeley National Laboratory and was the principal developer of performance tools at SiCortex. He holds a Bachelors from Indian Institute of Technology (IIT) Delhi, and an MS in Computer Science from the University of Utah.

Samara Technology Group LLC
11 Chaplin Circle
Boxford, MA 01921

USA Phone: 978-352-8389
www.samaratechnologygroup.com
For sales, please direct queries to
sales@samaratechnologygroup.com

