

CASE STUDY

Custom Multicore Training at ITG

Challenge

Investment Technology Group, Inc. (ITG), a brokerage and financial technology firm, provides integrated technology solutions that work seamlessly with clients' existing tools and infrastructure to enhance their investment processes. To further advance its offerings and perfect electronic trading operations for clients worldwide, ITG must be able to address the changing dynamics of the financial markets, improve system efficiencies and performance, and mitigate technical and financial risk through modern computing strategies.

Solution Description

- Created customized multicore training courses on C++ and C#/ .NET designed to address the needs of ITG's manifold developer and organizational requirements.
- Showed students how to recognize the best parallelism opportunities and explained the advantages of using threads and to obtain concurrency using various threading abstraction layers, analysis techniques, compositional approaches, and parallel design patterns.
- Provided comprehensive instruction on threading abstraction APIs for implementing C# parallelism with .NET 3.5 and 4.
- Taught students in-depth tuning and profiling strategies for the latest NUMA hardware platforms from Intel and Oracle.

Student Testimonials

- "I'm well pleased with both the course and the instructor. I would recommend both without hesitation." - *ITG Developer*
- "I thought the instructor was very engaging and interesting. There was very useful information in the course, and I expect to be able to make use of the online information going forward." - *ITG Developer*
- "The instructor was very knowledgeable. A lot of good content." - *ITG Developer*
- "Online materials are extensive and helpful." - *ITG Developer*



CASE OVERVIEW

Situation

In a highly competitive market, ITG must take advantage of the multicore hardware promise by integrating multi-language parallel software development and tuning methodologies into their Agile process to continuously improve clients' electronic investment processes.

Solution

nCore's premier customized multicore programming courses taught onsite and online in four locations throughout the US to 60 local and remote students.

Benefits

With new multicore development skills, ITG developers are able to improve order routing performance, reduce latency, increase throughput, and parallelize front office applications, delivering measurable bottom-line value to clients.

About nCore

nCore Design is a global provider of training and professional services focused on multicore and manycore computing platforms. As the world leader in hands-on, instructor-led training courses, nCore helps clients increase software performance, throughput, and efficiency while reducing time-to-market.

nCore has significant expertise in modern computing platforms and specialized knowledge of applied software optimization techniques. nCore also develops high performance solutions based on state-of-the-art parallel technologies.

nCore is a privately held company with offices in the US and Japan.

To inquire about nCore training at your facility, please call 971-228-0700 or email info@ncoredesign.com