



The Intel University Program

www.intel.com/thinkparallel

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Intel In Academia

Intel.com/thinkparallel

- Bringing Parallel Programming and Visual Computing to the classroom
 - Academic Partnerships
 - Leaders in Parallelism
 - Course Materials
 - Tools
 - News & Events
 - Training
 - Case Studies
 - Research

Intel Academic Showcase
Bringing Parallelism to Academia

Leadership Awards 2009
Advancing the definition of a Parallel Programming Curriculum. Congratulations to Professor Matt Wolf of Georgia Tech, and Professors Victor Pankratius and Walter Tichy of University of Karlsruhe, Germany.

Matt Wolf

1 2 3

1347 Universities
Total University Program Members

Month	Members
Feb	~1200
Mar	~1500
Apr	~1800
May	~2000

Think Parallel.
Get Intel Academic Community Benefits.
[Join Now](#)

More on Parallelism
Intel Multi-Core and Parallel Programming Community UPCR Community Experimental Software

Opportunities
Careers
Internships
Threading Challenge

Intel Software Community
Intel® Software Network
Code & Downloads

Academic Partnerships >
Supporting Academic Associations
Partnering with Government
Research Sponsorship

Leaders in Parallelism >
Intel Academic Community
Intel Leadership in Academia Award
Intel Academic Blackbelt: Clay Breshears

Courseware >
Academic Program Benefits
Multi-Core Curriculum
All Courseware

Tools >
Discount Pricing on Tools
Classroom Licenses for Academic Community Members
Intel® Parallel Studio

News & Events >

Training >
New Technology Curriculum for the needs of the academic
Lectures, libraries, performance and
Lectures presented by peers

Case Studies >

Research >

University Program

- Benefits

- World-wide reach -- over 1300 Universities in 79 Countries
- High impact – partnering with top research universities, associations and governments
- Immediate return -- bringing free software tools, course materials, and parallelism experts to the classroom.

- Free Membership

- Course materials for University faculty
- Face to face sessions, panel discussions at academic gatherings
- Intel software tools and support for classroom use
- Global Academic Community

- Academic Community

- Parallel programming course materials from Intel and faculty worldwide
- Forums, blogs, and regular streaming interviews with experts in the field
- Recognition and promotion of community leaders on and offline.



Intel University Program Benefits

- Training on Multi-Core and Parallel Programming
 - Instructor led in the classroom
 - Online courses
 - Webinars and Video
- Downloadable courseware
 - New technology curricula
- Intel Tools Licenses
 - Compilers, libraries, performance analyzer, threading tools
- Community events
 - Webinars, Teach Parallel interview series,
 - Trainings, Workshops, Advisory Boards
- Intel Academic Community Online
 - Resources and support
 - Forums, blogs & video

Free Resources for Educators



Multi-Core Curriculum

- Designed by experts on Intel software tools, technologies and initiatives, specifically for University Faculty
- Includes lecture presentations, hands-on lab sessions and reference materials
- Easily downloadable for immediate incorporation into university curricula or students training
- Can be used whole to start new courses or piecemeal to supplement existing courses

Multi-Core Courses and Modules

Algorithms and Complexity (AC)

Parallel Algorithms (Spring 2009)
Integrated Architecture and Tools

Architecture and Organization (AR) **Clusters and High Performance Computing**

Discrete Structures (DS) **Graphics and Visual Computing (GV)**

Parallel Architecture for Games
Game Threading Analysis & Methodology

Operating Systems (OS)

Programming Fundamentals (PF)

CS 112 Lab 10: Shared-Memory Parallelism Using OpenMP
Program Optimization for Multi-core Architectures
IIT Kanpur Summer workshop on Multicore Programming
Programming for Multicore Processors
Introduction to Parallel Programming
Threading for Performance with Intel® Threading Building Blocks
Parallel Programming with OpenMP 3.0

Programming Languages (PL)

Cilk++ Course materials

Software Engineering (SE)

Threaded Programming Methodology
Parallelism Tools : Checking for Thread Performance with the Intel® Thread Profiler
Parallelism Tools: Checking for Thread Correctness with the Intel® Thread Checker
Parallel Design Patterns

Complete Courses and Workshops

2009 Par Lab Boot Camp - Short Course on Parallel Programming
Multi-processor architecture and programming
Programming tools for multiprocessor and multicore computing systems S.A.Nemnyugin
CST407 Multi-core Programming

K-12 Courseware

Brooklyn Technical High School Multi-core Bootcamp