



April 2017 Newsletter

Intel® PCC Members Only Meeting & IXPUG Events

Just one week to go until the Intel® PCC Member's Only Meeting kicks off on April 10, 2017 from 1:00PM-5:00PM (GMT) at University of Cambridge in Cambridge, England. This event is by direct invitation only. If you have not received an email please send a message to IPCC.Program.Office@intel.com.

The [IXPUG Annual Spring Conference](#) follows our exclusive event, from April 11-14, 2017, also in Cambridge. The conference is open to the public and requires [registration](#).

Embree, OSPRay, OpenSWR. Learn how the experts are using Intel® Xeon Phi™ processors to maximize their code for Software Defined Visualization by attending the IXPUG workshop on May 22-25, 2017 at the Texas Advanced Computing Center. Register [HERE](#).

Speaking Opportunities

Present the results of your work and share best practices you've discovered at the following events. Don't forget to register and there are deadlines for abstract submissions.

Events and Details	Event Date	Deadlines	Speaking Opportunities
IXPUG ISC17 Workshop	Jun 22, 2017	Apr 14, 2017 Apr 29, 2017	Abstract Submission Paper Submission
ACM Gordon Bell Prize	Nov 12-17, 2017	Apr 15, 2017	Nomination Submission Form
IXPUG Working Groups	Monthly	Monthly	Share your real-code experience and/or questions during the meeting or discussion forum.
IXPUG Discussion Forum	Anytime	Anytime	

Intel® Xeon Phi™ Processor Access

We encourage you to optimize your application for multi-node by testing on the following clusters:

Texas Advanced Computing Center (TACC) Stampede Cluster:

- Click [HERE](#) and create a new account (**do not click on PI-eligible**) and follow the email instructions.
- Register account by emailing ipcc.program.office@intel.com with username.

Intel® Application Development Cluster (Endeavor):

- Request account by completing the form located [HERE](#).

Discount on Intel® Xeon Phi Processors Platforms: Order today and use code "EDUCATION" in the order form for a 10% discount. The systems are fully configured platforms and include CentOS, a 1 year license for Intel® Parallel Studio XE 2017 edition, free parallel programming training, and support from Colfax!

Training Opportunities

Continue your growth and connect with other HPC developers by participating in one of the many training opportunities available below:

Date	Location	Event
Apr 5, 2017	Virtual	Fast Insights to Optimized Vectorization and Memory
Apr 12, 2017	Virtual	Navigate Machine Learning & Deep Learning
Apr 17-28, 2017	Virtual	HOW Series "Deep Dive": Performance and Optimization
Apr 19, 2017	Virtual	Get Onboard with the Intel® Parallel Studio XE 2018 Beta
Apr 24, 2017	Seoul, South Korea	KNL System and Parallel Studio Workshop
Apr 25-26, 2017	Houston, TX	NAG Training Course
Apr 26, 2017	Virtual	Deep Learning At Your Finger Tips
Apr 26, 2017	Seoul, South Korea	KNL System and Parallel Studio Workshop
May 3, 2017	Virtual	Healthy, Happy Performing Clusters
May 3-11, 2017	Virtual	Improving Performance on the Intel Xeon Phi Processor
May 10, 2017	Virtual	Snapshot Your Performance and Improve!
May 17, 2017	Virtual	HPC Applications Deserve High Performance Analytics
May 22, 2017	Austin, TX	IXPUG Software-Defined Visualization Workshop
May 24, 2017	Virtual	Boosting Application Performance with Standard C++ Algorithm
May 31, 2017	Virtual	Accelerate Application Performance
Jun 7, 2017	Virtual	CPUs, GPUs, FPGAs: Managing the Alphabet Soup
Jun 14, 2017	Virtual	Julia for Machine Learning and Deep Learning
Anytime	Virtual	Intel® PCC IT4Innovations National Supercomputing Center

*NEW: Case Studies

Purdue University: [bMatching](#) is a C++ software implementing the b-Suitor algorithm, a ½ approximation algorithm for a variant of the matching problem in graphs. Their results show that the b-Suitor algorithm outperforms the Greedy and Locally Dominant edge algorithms by one to two orders of magnitude on a serial processor.

Indiana University: [MILC](#) is a large scale numerical simulation to study quantum chromodynamics, the theory of the strong interactions of subatomic physics. They summarize their progress on reaching the objective of reducing lattice-QCD errors, which would match the current experimental uncertainty.

Northwestern University: Deep Neural Networks (DNNs) are powerful types of artificial neural networks that use hidden layers. Their results show a classification-based financial markets prediction using DNNs with a 11.4x speedup and a python strategy back testing environment.

More News...

Read about the latest HPC news in the following articles:

- [CPU-based Visualization Positions for Exascale Supercomputing](#)
- [Accelerating Python and Deep Learning](#)
- [Intel Xeon Phi Memory Mode Programming \(MCDRAM\) in a Nutshell](#)
- [Making Sense of When to Use FPGAs](#)

