

## TCPP Oct-07 Newsletter - TCPP Service Awards Announcement

Dear TCPP member,

There are many volunteers serving tirelessly for the community. Therefore, we are introducing new service awards.

**Call for Nominations for TCPP Outstanding Service Awards:** TCPP announces service awards to recognize those individuals in the broader community who have had major professional service roles in conferences (TCPP and others), journals, various committees, major events, community resources, and international outreach, and those who have had major impact on the community at large in possibly other ways. Prof. Arnold Rosenberg, Univ. of Massachusetts Amherst, has graciously agreed to chair the inaugural Committee on TCPP Outstanding Service Awards. Please email the names of individual(s) nominated (self nomination allowed), a few sentences on their service contributions, and their email contacts to Prof. Rosenberg at [rsnbrg@cs.umass.edu](mailto:rsnbrg@cs.umass.edu) by Nov 9, 2007.

In this newsletter, among the sections which are new, there is an article on **“FPGA Floating Point Performance -- a pencil and paper evaluation”** by Dave Strenski, and announcements on two new books, **“Task Scheduling for Parallel Systems”** by Oliver Sinnen and **“Grid Computing for Bioinformatics and Computational Biology”** E-G. Talbi and A.Y. Zomaya. Also, there is one new NSF call for proposal on **“Cyber-Enabled Discovery and Innovation (CDD)”** in addition to two previously announced CFPs on **“Expeditions in Computing (Expeditions)”** and **“Computing Processes and Artifacts (CPA).”**

Some of you sent me your syllabus for your first introductory course on Parallel and Distributed Computing. Please send yours.

The TCPP awards setup caused some delay in sending this newsletter out – my apologies to a few individuals whose CFPs were not included. Attached below are the announcements submitted in the past several weeks. When you submit your event announcements to [TCPP-announce@cc.gatech.edu](mailto:TCPP-announce@cc.gatech.edu), please ensure that your submission deadline and hyperlink to event site are prominent.

Regards,

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### Articles

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Dave Strenski of Cray Inc writes: The TCPP community might find this article I wrote for HPCwire about estimating 64-bit Floating Point performance for FPGAs interesting. Accelerators for computers are coming and this article explains how they fit into the parallel processing.

**FPGA Floating Point Performance  
-- a pencil and paper evaluation**

HPC programmers are evaluating alternative accelerators to boost the performance of their applications. When looking at FPGAs, they are confronted with an array of new terminologies and concepts that can be difficult to understand at first. This article will walk the HPC programmer through understanding double precision (64-bit) floating-point performance of the Xilinx Virtex-4 LX200 and Virtex-5 LX330 FPGAs and compares them to the performance of a 2.5 GHz, dual-core Opteron processor. Read more at [www.hpcwire.com/hpc/1195762.html](http://www.hpcwire.com/hpc/1195762.html)

## **Books**

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1. Oliver Sinnen writes: I believe my book on "Task Scheduling for Parallel Systems" is worth an announcement in the monthly newsletter, as it is the only available book on the very popular task scheduling topic. Here are the details:

**Task Scheduling for Parallel Systems**, Oliver Sinnen, Publisher: Wiley, USA  
Hardcover, 296 pages, May 2007 ISBN: 978-0-471-73576-2  
<http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471735760.html>

Book Description (short): Extending beyond the classic approach by focusing on more advanced, accurate, and realistic models, this book investigates the concepts and techniques of task scheduling by developing a consistent and unifying theoretical framework. These system models consider heterogeneity, contention for communication resources and the involvement of the processor in communication.

2. **"Grid Computing for Bioinformatics and Computational Biology"** E-G. Talbi (INRIA Futurs, France) and A.Y. Zomaya (University of Sydney, Australia), John Wiley and Sons, 416 pages, 2007. ISBN: 978-0-471-78409-8

About this book:

Serving as a single up-to-date reference source, Grid Computing for Bioinformatics and Computational Biology provides details on modern and ongoing research on Grid applications. The book specifically discusses bio-ontology and data mining; data visualization; DNA assembly, clustering, and mapping; molecular evolution and phylogeny; gene expression and micro-arrays; gene identification and annotation; molecular modeling and simulation; molecular sequence analysis; protein structure prediction; sequence assembly; sequence search and alignment; bio data intensive applications; Grid infrastructures; middleware; and tools for bio data.

## **Call for Proposals**

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### **NSF Expeditions in Computing (Expeditions)**

A new NSF CISE program called "Expeditions in Computing" (Expeditions) provides the opportunity for the computing research community to pursue ambitious, compelling, and transformative research agendas that promise disruptive innovations in the computing and information fields. Funded at levels up to \$2,000,000 per year for five years, awarded projects are

expected to explore far-reaching research and education activities motivated by hard problems and/or compelling applications. Teams of investigators from within or across departments or institutions are encouraged to combine their expertise and talents to forge well-integrated research appropriate for the Expeditions program. More information about Expeditions is available at <http://nsf.gov/pubs/2007/nsf07592/nsf07592.htm>. Note the following deadlines: a Letter of Intent is due November 5, 2007, and the Preliminary Proposal is due December 30, 2007. It is estimated that only 20 collaborating teams will be invited to submit a full proposal due on April 1, 2008, with only 3 of those proposals anticipated for award.

### **NSF Computing Processes and Artifacts (CPA)**

The most recent NSF Computing Processes and Artifacts (CPA) cluster solicitation is available at <http://nsf.gov/pubs/2007/nsf07587/nsf07587.htm>. The proposal deadline is December 7, 2007. There are some changes compared to last year's solicitation, so submitters should carefully read the new solicitation. One notable change is that an investigator may participate on at most two proposals (instead of just one) as long as at least one of the proposals is a "team" or "major team" proposal, but note that only a very few proposals in these categories are expected to be awarded across the cluster.

### **NSF Cyber-Enabled Discovery and Innovation (CDI)**

The NSF has just announced its newest multidisciplinary, multi-year initiative: "Cyber-Enabled Discovery and Innovation (CDI)." CDI aims to create revolutionary science and engineering research outcomes made possible by innovations and advances in "computational thinking." Computational thinking is defined comprehensively as computational concepts, methods, models, algorithms, and tools. Applied in challenging science and engineering research and education contexts, computational thinking promises a profound impact on the Nation's ability to generate and apply new knowledge. Collectively, CDI research outcomes are expected to produce paradigm shifts in our understanding of a wide range of science and engineering phenomena and socio-technical innovations that create new wealth and enhance the national quality of life. For additional information about CDI, including frequently asked questions, please refer to <http://www.nsf.gov/crssprgm/cdi>. Examples of motivating science and/or engineering research and education opportunities can also be found there. This list is provided for purposes of illustration only; it is neither exhaustive, nor indicative of preference regarding research areas.

### **Call for Papers**

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DEADLINE	EVENT
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Oct 22, 2007	INA-OCMC Workshop on Interconnection Network Architectures: On-Chip, Multi-Chip <a href="http://www.disca.upv.es/jflich/wina/wina.html">http://www.disca.upv.es/jflich/wina/wina.html</a> Held in conjunction with the 3rd International Conference on High-Performance Embedded Architectures and Compilers (HiPEAC) <a href="http://www.hipeac.net">http://www.hipeac.net</a> conference) in Goteborg, Sweden, January 27, 2008
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Oct 24, 2007	WMSCI 2008 The 12th World Multi-Conference on Systemics,
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Cybernetics and Informatics: Jointly with The 14th International Conference on Information Systems Analysis and Synthesis: ISAS 2008, June 29<sup>th</sup> - July 2<sup>nd</sup>, 2008 – Orlando, Florida, USA  
<http://www.sciis.org/wmsci2008/Website/ImportantDates.asp?vc=1>

- Oct 28, 2007 PMEO-UCNS'08 7th International Workshop on Performance Modeling, Evaluation, and Optimization of Ubiquitous Computing and Networked Systems to be held with IPDPS'08 (Deadline EXTENDED)  
<http://www.inf.brad.ac.uk/~gmin/PMEO-08.html>
- Oct 29, 2007 JSSPP 2007 14th Workshop on Job Scheduling Strategies for Parallel Processing, In Conjunction with IPDPS 2008 Miami, FL 18 April 2008  
<http://www.cs.huji.ac.il/~feit/parsched/jsspp08/>
- Oct 31, 2007 MCDES 2008 Managing Complexity in a Distributed World -. An international conference, to be held in Bangalore, India 27-31 May 2008. <http://csa.iisc.ernet.in/MCDES-2008>
- Nov 12, 2007 CCGrid 2008 8th IEEE International Symposium on Cluster Computing and the Grid 18-22 May 2008, Lyon, France <http://ccgrid2008.ens-lyon.fr>
- Nov 15, 2007 WoWMoM 2008 9th IEEE International Symposium on A WORLD of WIRELESS, MOBILE, and MULTIMEDIA NETWORKS IEEE June 23-27, 2008, Newport Beach/Irvine, California, USA Workshop Proposal Submission Deadline ---October 1, 2007  
<http://www.ieee-wowmom.org/>
- Nov 15, 2007 WiSP'08 The first International Workshop on Wireless Security and Privacy, June 20, 2008, Beijing, China held in conjunction with The 28th International Conference on Distributed Computing Systems (ICDCS'08) [www.cs.wcupa.edu/~zjiang/wisp08.htm](http://www.cs.wcupa.edu/~zjiang/wisp08.htm)
- Nov 16, 2007 HPGC The Fifth High-Performance Grid Computing Workshop April 14, 2008, Miami, Florida Held in conjunction with The 22nd IEEE International Parallel and Distributed Processing Symposium - IPDPS'2008, April 14-18, 2008 <http://www.cs.unb.ca/profs/aubanel/hpgc/>
- Nov 20, 2007 NIDISC'08 The 11th International Workshop on Nature Inspired Distributed Computing held in conjunction with The 22th IEEE/ACM International Parallel and Distributed Processing Symposium (IPDPS 2008) 14-18 April 2008  
<http://www.lifl.fr/~talbi/nidisc08>
- Nov 23, 2007 PASA 2008 9th Workshop on Parallel Systems and Algorithms in Conjunction with 21st International Conference on Architecture of Computing Systems (ARCS) Dresden, Germany, Feb 25-28, 2008.  
<http://www.ra.informatik.tu-darmstadt.de/pasa/2008/>
- Nov 26, 2007 HiCOMB 2008 7th IEEE International Workshop on High Performance Computational Biology held in conjunction with the International Parallel and Distributed Processing Symposium. April 14, 2008 Hyatt Regency Resort Miami Florida, USA. <http://www.hicomb.org/>

- Nov 30, 2007 HPCS 2008: High Performance Computing and Simulation Symposium, part of the SCS Spring Simulation Multiconference (SMC'08) in cooperation with ACM/SIGSIM (pending)  
A joint symposium of DEVS Integrative M&S (DEVS) and High Performance Computing (HPC), April 14-16, 2008, Crowne Plaza Ottawa, Ontario <http://www.cs.vt.edu/hpcs2008/>
- Dec 7, 2007 CAC 2008 The Workshop on Communication Architecture for Clusters, To be held in Conjunction with the International Parallel and Distributed Processing Symposium (IPDPS 2008) Miami, Florida, April 14, 2008. <http://www.ccs3.lanl.gov/cac2008/>
- Jan 5, 2008 UIC-08 The 5th International Conference on Ubiquitous Intelligence and Computing - Building Smart Worlds in Real and Cyber Spaces Organized by Oslo University College and University of Stavanger, Norway, Oslo, Norway, June 23-25, 2008 <http://www.iu.hio.no/uic08/>
- Jan 10, 2008 NAS'08 International Conference on Networking, Architecture, and Storage, June 12-14, 2008, Chongqing, China <http://www-rohan.sdsu.edu/~taoxie/nas/>
- Jan 11, 2008 CSE-08 9th IEEE International Conference on Computational Science and Engineering, June 25-27, 2008 - Sao Paulo - Brazil <http://www.icmc.usp.br/cse08>

### **Call for Paper for Special Journal Issue**

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- Jan 31, 2008 Special Issue (Volume 2, Issue 1) on **Collaborative Supply Chain Management** for *Int. J. of Information Systems and Supply Chain Management* [www.igi-global.com/ijissem](http://www.igi-global.com/ijissem)  
Guest Editor: Jairo R. Montoya-Torres [jairo.montoya@unisabana.edu.co](mailto:jairo.montoya@unisabana.edu.co)

### **Call for Workshop Proposal**

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- Nov 30, 2007 CSE-08 9th IEEE International Conference on Computational Science and Engineering, June 25-27, 2008 - Sao Paulo - Brazil <http://www.icmc.usp.br/cse08>

### **Call for Participation**

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- Nov 6, 2007 ACM SenSys 2007 Doctoral Colloquium <http://www.comp.lancs.ac.uk/~hazas/sensys07dc/>

- Dec 17-20, 2007 OPODIS'07, International Conference On Principles Of Distributed Systems, Guadeloupe, French West Indies, December 17-20th, 2007  
[www.opodis.net](http://www.opodis.net)
- Dec18-21, 2007 HiPC-07 14th IEEE/ACM International Conference on High Performance Computing, Goa, <http://www.hipc.org>  
\* Advance Registration Deadline: November 07, 2007

### **Positions Open**

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1. Post Docs Position - The DOLPHIN project from the INRIA research institute in France is opening a postdoc position. The position is funded by a grant from the AFM Foundation and CNRS. The position is for one year with possibility of extension. The default starting date is Oct 2007. Skills: Combinatorial optimization, Metaheuristics, Grid computing, Bioinformatics, Molecular biology. Title : Docking@GRID : Molecular docking on Grids  
<http://www.lifl.fr/~talbi/docking>

2. Department Head of Computer Science at Virginia Tech - Wuchun FENG of Virginia Tech writes: Our department is looking for a new Department Head of Computer Science at Virginia Tech (CS@VT). CS@VT is expanding with regard to people, research, and resources. In the last 5 years, 18 faculty members have been hired to make a total of 45; there are 8 recent CAREER awards. Research expenditures have more than tripled in the last 7 years. For additional information on the position, please go to <http://jobs.vt.edu/> and apply to job 070739.