FIRST GPU PROGRAMMING HACKATHON @ UDEL MAY 2 - 6 in collaboration with OAK RIDGE NATIONAL LAB

SCHEDULE

VENUE: TRABANT MULTIPURPOSE ROOM, UNIVERSITY OF DELAWARE
Venue hours 8AM to midnight, every day.

TENTATIVE SCHEDULE: Please click HERE. There will be scrums each day, timings vary.
Note: On the first day, May 2 - we begin at 2PM. See the schedule.

INVITED TALK: By DR. ERIC NIELSEN, NASA LANGLEY @ 127 Memorial Hall, @ 11AM.
Please click HERE for more details.

PARTICIPATING TEAMS

COMPUTER AND INFORMATION SCIENCES
ELECTRICAL AND COMPUTER ENGINEERING
CHEMICAL AND BIOMOLECULAR ENGINEERING
NASA LANGLEY
NATIONAL CANCER INSTITUTE/NIH
BROOKHAVEN NATIONAL LAB

Working with MENTORS from NVIDIA, PGI, UT-Knoxville, Cornell, Oak Ridge National Lab and UDEL
For 5 DAYS
Porting legacy scientific codes such as computational fluid dynamics, lattice QCD, RNA sequencing, kinetic model builders to the world's second largest supercomputer at ORNL - TITAN equipped with 18,688 GPUs

GOAL OF THE HACKATHON

The goal of each hackathon is for current or prospective user groups of large hybrid CPU-GPU systems to send teams of at least 3 developers along with either

- A (potentially) scalable application that needs to be ported to GPU accelerators
- An application running on accelerators which needs optimization
There will be intensive mentoring during this 5-day hands-on workshop, with the goal that the teams leave with applications running on GPUs, or at least with a clear roadmap of how to get there. Our mentors come from national laboratories, universities and vendors, and besides having extensive experience in programming with OpenACC/CUDA, many of them develop the GPU-capable compilers and help define the OpenACC standard.

**SELECTION PROCESS**

The selection process includes identifying teams of 3-6 developers with a scalable application to port to or optimize on a GPU accelerator. Collectively the team should know the application intimately. If application is a suite of apps, no more than two per team is allowed and a minimum of 2 people per app must attend.

PRIOR GPU EXPERIENCE or [OPENACC](http://openacc.org) PROGRAMMING EXPERIENCE NOT REQUIRED.

If you are new to GPUs, you are welcome to join participating groups and just learn :-). NOTE: The workshop is more like a GPU Programming training event!

**PRIZES**

Developers will get access to large machines such as [Blue Waters](http://www.mcs.anl.gov/Blue_Waters), [Piz Daint](http://www accruer.ch/PizDaint) and [Titan](http://wwwpsc.w.llnl.gov/titan). We also are working to setup opportunities for you to present your work at upcoming supercomputing related conferences such as [SC](http://www.sc15.nvidia.com), [GTC](http://www.gtc2015.com), [CUG](http://www.cug2016.org) and [ISC](http://www.isc.org). Oh and one more thing there may be goodies too. Stay tuned!

**EDUCATION AND TRAINING PRIOR TO THE HACKATHON**

You are strongly encouraged to attend a few workshops from XSEDE:

- [MPI Workshop February 9-10, 2016](http://www.xsede.org/events/mpi_workshop_2016)
- [OpenACC on March 8, 2016](http://www.xsede.org/events/openacc_2016)

Please continue to check [UDEL Education and Training Calendar](http://www.xsede.org/education) for registration and further details.
HOTEL ACCOMMODATION

We have blocked a number of rooms at The Marriott and The Embassy Suites, both located in and around UDEL Campus.

**Courtyard Newark-University of Delaware** GROUP RATE: $156 (single or double, room type) UNTIL April 8, 2016. After this date, regular rates will apply. EVENT NAME: Hackathon Room Block. To make reservations, Call - (302) 737-0900.

To make reservations at The Embassy Suites at a special rate until April 03, 2016:
GO TO RESERVATION

CONTACT

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