Welcome to the ACCESS OpenACC Workshop

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Who are we?

Your hosts:
Pittsburgh Supercomputing Center

part of

ACCESS | Advancing Innovation
Who am I?

John Urbanic

Distinguished Service Professor
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Undergrad Advanced Computational Physics
Graduate Large Scale Computing
Data Science Capstone Projects

Parallel Computing Scientist
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Code, code, code, on
Parallel platforms: MPI, OpenMP, OpenACC, ...
Big Data platforms: Spark, ...
Machine Learning: Spark, TensorFlow, PyTorch, ...
HPC Monthly Workshop Philosophy

- Workshops as long as they *should* be.

- You have real lives…
  - in different time zones…
  - that don’t come to a halt.

- Learning is a social process
  - This is not a MOOC
  - This is the *Wide Area Classroom*
    so raise your expectations!
Agenda

Thursday, June 29

11:00  Welcome
11:15  Computing Environment
11:45  Parallel Computing and Accelerators
12:15  Introduction to OpenACC
1:00   Lunch Break
2:00   Introduction to OpenACC and exercises
4:00   Using OpenACC with CUDA Libraries
4:30   Advanced OpenACC and OpenMP 4.0
5:00   Final Notes and Adjourn
Resources

Your local TAs

Questions from the audience

On-line talks

Copying code from PDFs is very error prone. Subtle things like substituting "-" for "_" are maddening. I have provided online copies of the codes in a directory that we shall shortly visit. I strongly suggest you copy from there if you are in a cut/paste mood.

The old XSEDE YouTube Channel

These are the last WAC versions of these events and have much of this content. Find them on the XSEDE Monthly Workshop Training Channel:

**XSEDETraining**

They will be incrementally appearing in the coming months on a new channel. Subscribe and give us feedback.