Seminar Talk

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Old Dominion University

Tuesday, January 30, 2018
3:00 p.m. KH 224

Title: High Performance Computer for Engineering Research

Abstract:

In this talk, I will present an overview of the Research Computing Services at ODU, supporting faculty and student's research computing needs. Our primary high-performance computing (HPC) cluster is "Turing", equipped with the state-of-the art computing hardware and software. Turing has supported research activities in many different disciplines at ODU: oceanography, bioelectrics, chemistry, biology, computer science and engineering, and even social sciences. I will present the use cases of Turing in science and engineering. Research Computing Services also offer extensive support services and trainings to support our users, so that they are able to use Turing effectively to achieve their research goals. Turing is freely available to ODU academic members for research purposes.

Bio:

Wirawan Purwanto is a computational scientist with the Research Computing Group at Old Dominion University (ODU). He supports ODU students and faculty members in their research computing needs, ranging from user support, onboarding, and training; computer program parallelization, optimization, and debugging; grant proposal preparation. He works with students and faculty members from Science, Engineering, as well as other disciplines. Purwanto received his Ph.D. in physics from the College of William and Mary in 2005. He continued as a postdoctoral research fellow and research scientist at the College of William and Mary until joining ODU in 2015. His research area is computational condensed matter physics and quantum chemistry, with a focus on strongly correlated electronic systems. He has developed computer programs to calculate the properties of materials using massively parallel supercomputers. His work on some of the most challenging solids and molecules has been published in Physical Reviews, the Journal of Chemical Physics, and the Journal of Chemical Theory and Computation. Purwanto's current interests include scientific computation, parallel computing, frontiers of high-performance computing technologies, as well as computing education. He loves computer technology and its application to scientific research. He can be reached at wpurwant@odu.edu.