

Putt Sakdhnagool

National Electronics and Computer Technology Center (NECTEC)

112 Thailand Science Park, Phahonyothin Raid, Khlong Nueng, Khlong Luang, Pathum Thani, 12120,
Thailand

Office: +6625646900 ext 2600; Email: putt.sakdhnagool@nectec.or.th

Education and Training

2008	BEng	Computer Engineering	Kasetsart University, Thailand
2011	MSc	Computer Science	University of California, San Diego, CA, USA
2017	PhD	Computer Engineering	Purdue University, IN, USA

Research and Professional Experience

Description: Research and education on large-scale quantum and reactive molecular dynamics simulation methods, massive dataset visualization and analytics for non-adiabatic quantum dynamics simulations and computational materials science.

2017 - Present	Researcher, National Electronics and Computer Technology Center (NECTEC), Thailand
2016 – 2017	Research Assistant, Purdue University
2013, 2014	Advance Short Term Research Opportunity Program, Oak Ridge Associated Universities
2010 – 2011	Graduate Assistant, University of California, San Diego (UCSD)

Publications:

1. *Massively parallel 3D image reconstruction*, X. Wang, A. Sabne, P. Sakdhnagool, S. J. Kisner, C. A. Bouman, S. P. Midkiff, Proceedings of the International Conference for High Performance Computing, Networking, Storage and Analysis (SC), 2017.
2. *Pagoda: fine-grained GPU resource virtualization for narrow tasks*, T. Yeh, A. Sabne, P. Sakdhnagool, R. Eigenmann, T. Rogers, ACM Symposium on Principles and Practice of Parallel Programming (PPoPP), 2017
3. *Formalizing Structured Control Flow Graphs*, A. Sabne, P. Sakdhnagool, R. Eigenmann, International Workshop on Languages and Compilers for Parallel Computing (LCPC), 2016
4. *HYDRA: extending shared address programming for accelerator clusters*, P. Sakdhnagool, A. Sabne, R. Eigenmann, International Workshop on Languages and Compilers for Parallel Computing (LCPC), 2015
5. *Understanding portability of a high-level programming model on contemporary heterogeneous architectures*, A. Sabne, P. Sakdhnagool, S. Lee, J. S. Vetter, IEEE Micro Magazine, July-August, 2015
6. *HeteroDooop: a MapReduce programming system for accelerator clusters*, A. Sabne, P. Sakdhnagool, R. Eigenmann, ACM International Symposium on High-Performance Parallel and Distributed Computing (HPDC), 2015
7. *Evaluating performance portability of OpenACC*, A. Sabne, P. Sakdhnagool, S. Lee, J. S. Vetter, International Workshop on Languages and Compilers for Parallel Computing (LCPC), 2014
8. *Scaling large-data computations on multi-GPU accelerators*, A. Sabne, P. Sakdhnagool, R. Eigenmann, Proceedings of the 27th international ACM conference on International conference on supercomputing (ICS), 2013
9. *Effect of compiler optimizations in OpenMP to CUDA translation*, A. Sabne, P. Sakdhnagool, R. Eigenmann, International Workshop on OpenMP (IWOMP), 2012