

Professional Activities - External

Journal Guest Co-Editorship

- Springer, Communications in Computer and Information (CCIS). Book on Tools and Techniques for High Performance Computing. Selected papers from SC19 Workshop. Co-edited with Dr. Guido Juckeland, ISBN 978-3-030-44728-1. April 2020
- Springer, Lecture Notes in Computer Science (LNCS). Book on Accelerator Programming Using Directives. Selected papers from SC18 Workshop on Accelerators using Directives, co-located with SC18. Co-edited with Dr. Guido Juckeland, ISBN 978-3-030-12274-4. February 2019
- Springer, Lecture Notes in Computer Science (LNCS). Book on Accelerator Programming Using Directives. Selected papers from SC18 Workshop on Accelerators using Directives, co-located with SC17. Co-edited with Dr. Guido Juckeland, ISBN 978-3-319-74896-2. February 2017
- Journal of BMC Bioinformatics, Topic: Computational Approaches for Cancer. <https://doi.org/10.1186/s12859-018-2502-x>, 19:487, Co-edited with Dr. Eric Stahlberg, December 2018
- Journal of Parallel Computing (PARCO). Application for Heterogeneous Computing Era. Volume 77, Co-edited with Dr. Antonio Pena, <https://doi.org/10.1016/j.parco.2018.06.002>, September 2018
- Journal of Parallel Computing (PARCO). Topics on Heterogeneous Computing Era. Volume 68, Co-edited with Dr. Antonio Pena, <https://doi.org/10.1016/j.parco.2017.08.001>, October 2017
- Inderscience Publishers. Journal on Novel Strategies for Programming Accelerators. Co-edited with Dr. Guido Juckeland <http://www.inderscience.com/info/ingeneral/cfp.php?id=3437>, December 2017
- Inderscience Publishers. Journal on High-level Programming Approaches for Accelerators. Co-edited with Dr. Guido Juckeland <http://www.inderscience.com/info/ingeneral/cfp.php?id=3438>, December 2017
- Journal of Scientific Programming. Programming Models, Languages, and Compilers for Manycore and Heterogeneous Architectures. Volume 2015, Article ID 376317, <http://dx.doi.org/10.1155/2015/376317>, 2015

External Scientific Advisory Board

- European H2020 project: EPEEC (European joint Effort toward a Highly Productive Programming Environment for Heterogeneous Exascale Computing) Scientific-Industrial Advisory Board (SAIB), Barcelona Supercomputing Center, Spain, 2018-2020

Proposal Reviewer, US and International

- NSF Review Panel, 2016, 2017, 2018, 2019
- Natural Sciences and Engineering Research Council of Canada, Canada, Review Panel, 2017
- DFG (German Research Foundation), Germany, Review Panel, 2017

Technical Specification and Book Reviewer

- Computer Systems: An Embedded Approach, Textbook by Ian McLoughlin, September, 2018
- Multicore Association (MCA)' Task Management Standard API (MTAPI) and Software-hardware Interface for multi-many-core,(SHIM), 2013-2015

Editorial Affiliations

- Journal of Parallel Computing (PARCO) - Subject Area Editor, 2019 - Present
- Journal of Parallel and Distributed Computing (JPDC) - Associate Editor, 2019 - Present

Steering Committees

- NSF Workshop on Future Directions of the CSSI program, Steering Committee Role, 2019
- Women in HPC, SC, Steering Committee Role, 2016-2018
- Women in HPC, ISC, Steering Committee Role, 2016-2018

Chair and Co-Chair - Conferences/Workshops/Symposiums/Scholarships

- Track Leader of the Invited Speaker Program, ISC 2020/2021
- Technical Program Co-Chair, PASC 2020
- Early Career Program, Vice Chair, SC 2020
- International Workshop on Accelerators and Hybrid Exascale Systems (AsHES) co-located with IPDPS, General Chair, 2018, 2019
- Research Posters Chair, International Supercomputing Conference (ISC), 2019
- Workshops Chair, Supercomputing Conference (SC19), 2019
- Technical Program Co-Chair, The Platform for Advanced Scientific Computing (PASC), 2019
- Research Posters Vice-Chair, International Supercomputing Conference (ISC), 2018
- ACM Intel Leadership fellows, SC 2018
- Workshop Co-chair, 1st to 4th International Workshop on Performance Portable Programming Models for Accelerators (P³MA) co-located with ISC, 2016 - 2019
- Workshop Co-Chair, 1st - 5th Workshop on Accelerator Programming Using Directives (WAACPD), co-located with SC conference, 2014-2018
- General Chair, 7th and 8th International Workshop on Accelerators and Hybrid Exascale Systems (AsHES) co-located with IPDPS, 2017, 2018
- Workshop Co-Chair of the 1 - 3th HPC Applications in Precision Medicine co-located with ISC, 2017-2019
- Doctoral Showcase Chair, SC17
- Workshop Co-chair, 4th-6th International Workshop on Accelerators and Hybrid Exascale Systems (AsHES) co-located with International Parallel & Distributed Processing Symposium (IPDPS), 2014-2016
- Vice-Chair of Software Track, International Parallel & Distributed Processing Symposium (IPDPS), 2017

- Track-Chair of Programming Models and Systems Software, International Supercomputing Conference (ISC), 2017
- Poster and Research Demo Chair, 15th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, (CCGrid), 2015
- Workshop Chair, Programming Models, Languages and Compilers Workshop for Manycore and Heterogeneous Architectures (PLC), co-located with , International Parallel & Distributed Processing Symposium (IPDPS),2015
- Workshop Chair, 1st and end Workshop on Directives and Tools for Accelerators: A Seismic Programming Shift, 2014-2015

Technical Program Committee - Conferences/Workshops/Symposiums/Scholarships

- Supercomputing Conference, SC 2020
- International Conference of Supercoming, ICS, 2020
- International Supercomputing Conference (ISC), 2019
- Workshops for IPDPS 2019
- SC Conference, 2018
- DOE Leadership Computing | INCITE Program, 2018
- International Parallel & Distributed Processing Symposium (IPDPS), 2018
- IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, (CCGrid),2018
- International Workshop on FPGAs for Software Programmers, 2018
- 3rd Workshop on Open Source Supercomputing, 2018
- Doctoral Showcase Chair, SC17
- International Conference on Parallel Processing (ICPP), 2017
- IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, (CCGrid) (Track: "Programming Models and Runtime Systems"), 2017
- SC conference 2016
- Doctoral Showcase, Birds of Feather (Algorithms Track), Workshop on Computing and Cancer, Workshops on Energy Efficient Supercomputing (E2SC)
- International Workshop on FPGAs for Software Programmers (FSP), 2016
- International European Conference on Parallel and Distributed Computing (Euro-Par), 2016
- International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD), 2016
- International Conference on Network and Parallel Computing, 2016 International Conference on Parallel Processing (ICPP), 2016
- DOD Workshop on Mission-Critical big data analytics, 2016
- First International Workshop on Open POWER for HPC (IWOPH) co-located with ISC, 2016 IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, (CCGrid), 2014-2016

- 30th IEEE International Parallel & Distributed Processing Symposium, PhD Panel on research and career planning and PhD Poster Judging Committee, 2015
- SC conference, 2015
- Doctoral Showcase Committee, Technical Program Committee (Performance Track), 2016
- IEEE Cluster, 2014
- 8th Workshop on General Purpose Processing using GPUs (GPGPU-8), 2014
- 22nd European Signal Processing Conference (EUROSIP), 2014
- International Symposium on Integrated Circuits (ISIC), 2014
- Workshop on Multicore and GPU Programming Models, Languages and Compilers, PLC, co-located with IPDPS, 2013- 2014
- International Joint Conference on Neural Networks (IJCNN), 2015
- The International Conference for High Performance Computing, Networking, Storage and Analysis (SC) 2012, 2013
- ACM Student Research Competition, Poster Committee
- 50th Design Automation Conference (DAC) (External Reviewer), 2012

Adhoc Journal Reviewer

- Journal of Parallel and Distributed Computing (JPDC)
- IEEE Transactions on Cloud Computing (TCC)
- International Journal of Parallel Programming (IJPP)
- Transactions on Architecture and Code Optimization (TACO)
- Elsevier Parallel Computing (PARCO)
- Journal of Supercomputing (SUPE)
- Transactions on Software Engineering (TSE)
- IEEE Transactions on Parallel Distributed Systems (TPDS)
- Concurrency and Computation: Practice and Experience (CCPE)
- Elsevier Future Generation Computer Systems (FGCS)
- IEEE/ACM Transactions on Computational Biology and Bioinformatics(TCBB)

Training Students and Professionals to use GPUs: Hackathons

- GPU Programming Hackathon Training in collaboration with Oak Ridge National Laboratory, Venue: Brookhaven National Laboratory (BNL), NY, USA, June 2017
- GPU Hackathons and Workshops-based training in collaboration with Oak Ridge National Lab and NVIDIA. Venue: University of Delaware (UDEL), Newark, DE, May 2016

- Hands-on training. Introduction to GPGPU Architecture and OpenACC. Center for Advanced Computing and Data Systems (CACDS). University of Houston (UH), Houston, TX, April 2014

Outreach and Media Coverage

Articles

- CAAR (Center for Accelerated Application Readiness) Project awarded from Oak Ridge National Lab, 2019
Udaily: <https://www.udel.edu/udaily/2019/september/Sunita-Chandrasekaran-Oak-Ridge-Center-for-Accelerated-Application-Readiness-Frontier/>
- Prediction of Chemical Shift of Protein Structures using OpenACC, 2019.
HPCWire: <https://www.hpcwire.com/2020/01/24/whats-new-in-hpc-research-tsunamis-wildfires-the-large-hadron-collider-more/>
- NSF Grant to Create Powerful Software Framework, 2018.
Udaily: <https://insidehpc.com/2018/10/sunita-chandrasekaran-receives-nsf-grant-create-powerful-software-framework/>
InsideHPC: <https://www.udel.edu/udaily/2018/october/sunita-chandrasekaran-reusable-software/>
- Talk given at the Princeton Bootcamp, 2018.
Princeton News: <https://www.princeton.edu/news/2018/11/09/princeton-launches-computing-bootcamp-graduate-students-and-postdocs>
- An Overview of ‘OpenACC for Programmers’ from the Book’s Editors, 2018.
HPCWire: <https://www.hpcwire.com/2018/06/20/an-overview-of-openacc-for-programmers-from-the-books-editors/>
- IEEE TCHPC Early Career Award
HPCWire: <https://www.hpcwire.com/off-the-wire/university-delawares-sunita-chandrasekaran-honored-excellence-hpc/>
- University of Delaware named an NVIDIA GPU Education Center, 2016.
Udaily: <https://www.udel.edu/udaily/2016/september/nvidia-gpu-education-center/>

Media Coverage

- SC19 Live Interviews, Workshop Chair, 2019.
Interview with SC Media: <https://www.facebook.com/SCconferences/videos/1716032991866956/>
- Highlights from the Technical Papers Program at PASC19, 2019.
Interview with PASC Conference Media: <https://www.youtube.com/watch?v=RtMACopAWOs>
- Presentation of PASC19 Paper Track by the two chairs, 2019.
Interview with InsideHPC: <https://www.youtube.com/watch?v=NFAAaFTGiQM>
- OpenACC Eases GPU Programming for HPC at SC17, 2017.
Interview with InsideHPC: https://www.youtube.com/watch?v=0GW2sP0whdc&feature=emb_title
- OpenACC Brings Directives to Accelerated Computing at ISC 2017.
Interview with InsideHPC: <https://www.youtube.com/watch?v=W2T3C1P4BZY>

- GPU Programming Hackathon hosted at the University of Delaware, 2016. **NVIDIA Developer News:** <https://news.developer.nvidia.com/scientists-gather-at-university-of-delaware-for-openacc-hackathon/>

Professional Development

- Eastern Nook Promotion and Tenure Workshop, New Jersey, 2019
- Write Winning Grant Proposals Workshop, Virginia, 2017
- CRA Career Mentoring Workshop, Virginia, USA, 2016
- NSF CISE CAREER Workshop, Virginia, 2016

Professional Affiliations

- ACM, IEEE, OpenMP, OpenACC, SPEC

Professional Activities - UDEL

University

- University, Cost Recovery Working Group, Spring 2020
- Faculty Peer Observation Program (FPOP), Spring 2017 - Spring 2019

College of Engineering

- Dean's Junior Faculty Advisory Council, Spring 2018 - Spring 2019
- Search committee for digital content specialist, Summer 2016

Department of Computer & Information Sciences

- Executive Committee, Fall 2019 - Spring 2020
- Marketing Committee, Fall 2018 - Fall 2019
- Faculty Search Committee - High Performance Computing, Fall 2018 - Spring 2019
- Search Committee - Teaching (Continuing), Fall 2016 - Spring 2017
- Publicity Committee, Fall 2016 - Spring 2017
- Faculty Search Committee - Networking, Fall 2016 - Spring 2016