

Two Students Named Recipients of ACM/IEEE-CS George Michael Memorial HPC Fellowships

NEW YORK, NY & LOS ALAMITOS, Calif., August 5, 2015 -- Maciej Besta of ETH Zurich and Dhairya Malhotra of the University of Texas at Austin have been named recipients of [2015 ACM/IEEE-CS George Michael Memorial HPC Fellowships](#).

Maciej Besta, a PhD student in the Scalable Parallel Computing Lab led by Professor Torsten Hoefler at ETH Zurich, won recognition for his project, "Accelerating Large-Scale Distributed Graph Computations." During first year as a PhD student, Besta successfully completed several projects related to various HPC subdomains, which secured Besta the first Google European Doctoral Fellowship in Parallel Computing.

Besta's research interests focus on improving the performance of large-scale graph processing in both traditional scientific domains and in the emerging big data computations. Besta and his advisor also collaborate with researchers from the Georgia Institute of Technology on designing a novel on-chip topology for future massively parallel manycore architectures that improves the performance of network traffic patterns present in graph processing workloads.

Dhairya Malhotra, a PhD student at the University of Texas at Austin actively working in the field of high performance computing, won recognition for his project, "Scalable Algorithms for Evaluating Volume Potentials." As an undergraduate intern, Malhotra was part of the group that won the 2010 ACM Gordon Bell Prize for "Petascale Direct Numerical Simulation of Blood Flow on 200K Cores and Heterogeneous Architectures," where he had implemented performance critical GPU code using CUDA.

Malhotra's research focuses on developing fast scalable solvers for elliptic PDEs such as Poisson, Stokes and Helmholtz equations. Additionally, a significant contribution of Malhotra's research has been development of the pvfmm library (Parallel Volume Fast Multipole Method) for evaluating volume potentials efficiently.

The ACM/IEEE-CS George Michael Memorial HPC Fellowship is endowed in memory of George Michael, one of the founding fathers of the SC Conference series. The fellowship honors exceptional PhD students throughout the world whose research focus areas are in high-performance computing, networking, storage, and large-scale data analysis.

Fellowship winners are selected each year based on overall potential for research excellence, the degree to which technical interests align with those of the HPC community, academic progress to date, recommendations by their advisors and others, and a demonstration of current and anticipated use of HPC resources.

The fellowship includes a \$5,000 honorarium, plus travel and registration to receive the award at the annual SC15 conference.

About ACM

ACM, the Association for Computing Machinery (www.acm.org), is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

About IEEE Computer Society

IEEE Computer Society, www.computer.org, is one of the world's leading computing membership organizations and a trusted information and career-development source for a global workforce of technology leaders including: professors, researchers, software engineers, IT professionals, employers, and students. IEEE Computer Society provides high-quality, state-of-the-art information on an on-demand basis. The Computer Society provides a wide range of forums for top minds to come together, including technical conferences, publications, a comprehensive digital library, unique training webinars, and professional training. IEEE is the world's largest professional association for advancement of technology and the Computer Society is the largest society within IEEE.

About SC15

SC15 (<http://sc15.supercomputing.org>), sponsored by ACM and IEEE-CS offers a complete technical education program and exhibition to showcase the many ways high performance computing, networking, storage and analysis lead to advances in scientific discovery, research, education and commerce. This premier international conference includes a globally attended technical program, workshops, tutorials, a world class exhibit area, demonstrations and opportunities for hands-on learning.

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