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NEWS RELEASE

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ACM INTRODUCES NEW AWARD TO RECOGNIZE RESEARCH THAT USES HIGH PERFORMANCE COMPUTING TO COMBAT COVID-19

Nominations Open for Gordon Bell Special Prize for HPC-Based COVID-19 Research

New York, NY, May 12, 2020 – ACM, the Association for Computing Machinery, today announced the inception of the ACM Gordon Bell Special Prize for High Performance Computing-Based COVID-19 Research. The new award will be presented in 2020 and 2021 and will recognize outstanding research achievements that use high performance computing (HPC) applications to understand the COVID-19 pandemic, including the understanding of its spread. Nominations will be selected based on performance and innovation in their computational methods, in addition to their contributions toward understanding the nature, spread and/or treatment of the disease.

A cash prize in the amount of \$10,000 will accompany the award, which was conceived and funded by Gordon Bell, a pioneer in high performance computing and researcher emeritus at Microsoft Research. The new COVID-19-focused award is a complement to the longstanding ACM Gordon Bell Prize, which recognizes outstanding achievement in high performance computing applications. Nominations can now be submitted via an online submission form and will be accepted through October 8, 2020.

“We hope this new award will serve as a catalyst to encourage researchers to explore how high performance computing might help better understand the COVID-19 virus,” explained Gordon Bell. “The award will recognize outstanding achievements, while also disseminating inspirational research that addresses this global crisis.”

“People around the world understand the urgency of finding ways to end or mitigate the COVID-19 pandemic,” said ACM President Cherri M. Pancake. “ACM is pleased to manage this new award, which hopefully will spur computer scientists at all levels to reimagine how the powerful tools of high performance computing can be used in everything from vaccines to tracking, and perhaps even preventing the next pandemic. We thank Gordon Bell for coming to ACM with the idea for this special award, and his generosity in funding it.”

As with the corollary [ACM Gordon Bell Prize](#), the recipient of the inaugural ACM Gordon Bell Special Prize for High Performance Computing-Based COVID-19 Research will be offered the opportunity to

present their work at [The International Conference for High Performance Computing, Networking, Storage, and Analysis \(SC 2020\)](#), and have their research published in [The International Journal of High Performance Computing Applications \(IJHPCA\)](#).

Individuals or teams may apply for the award. Nominations will be evaluated based on the following considerations:

- Evidence of important algorithmic and/or implementation innovations
- Clear improvement over the previous state of the art
- Performance is not dependent on an architecture that is specialized or cannot be replicated
- Detailed performance measurements demonstrate the submission's claims in terms of scalability (strong as well as weak scaling), time to solution, and efficiency in using bottleneck resources (such as memory size or bandwidth, communications bandwidth, I/O), as well as peak performance
- Achievement is generalizable, in the sense that other scientists can learn and benefit from the innovations
- Although making an important contribution to the understanding of the nature, spread and/or treatment of the disease is a key criterion, scientific outcomes alone are not sufficient for this prize

Those seeking further information are encouraged to visit the nominations webpage for this award at <https://awards.acm.org/bell/covid-19-nominations>.

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.

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