

Welcome

- Meeting will get started at 8am ET
- Please mute your microphone
- Ask questions in chat
- Add your name to the attendance:
 - <https://tinyurl.com/SIGHPCEDU2020>

SigHPC Education Chapter

A virtual special interest group of the ACM

General Meeting and Open House
December 1st, 2020

<https://sighpceducation.acm.org>

Agenda

- Welcome and Chapter Overview (Dirk Colbry Current Chair)
- Current Project and Activities (by committee)
 - Education Content
 - Computational Science Education
 - Workshop Committee
 - Outreach Committee
 - Systems Professional
 - K12
- New Projects and Activities
 - SigHPC Edu Awards
- Request for new members

What is ACM?

Professional Organization

We see a world where computing helps solve tomorrow's problems – where we use our knowledge and skills to advance the profession and make a positive impact.



**Association for
Computing Machinery**

<http://acm.org>

What is SigHPC?

SigHPC's mission is to help spread the **use of HPC**, help raise the **standards of the profession**, and help ensure a **rich and rewarding career** for people involved in the field.



<http://www.sighpc.org>

<https://sighpceducation.acm.org>



Association for
Computing Machinery

What is SigHPC Education?

SigHPC Education is a virtual chapter focused on supporting, improving, and stewarding education and training efforts in the HPC community.



<https://sighpceducation.acm.org/>

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SigHPC Education – The Vision

- Promote an increased knowledge of, and greater interest in, the educational and scientific aspects of HPC and their applications.
- Provide a means of communication among individuals having an interest in education and career building activities relating to HPC.
- Promote and collate education activities and programs through formal and informal education activities.
- Provide guidance to the community on the competencies required for effective application of computational modeling, simulation, data analysis, and visualization techniques.
- Provide information on quality educational programs and materials as well as facilitating access to existing HPC resources.

Current Leadership

Chair: Dirk Colbry

Vice-Chair: Scott Callaghan

Secretary-Treasurer: Kate Cahill

At-Large: Shawn Sendlinger

At-Large: Steven Gordon

At-Large Pacific: Ann Backhaus

At-Large Europe: Martin Callaghan

officers@sighpceducation.acm.org

Education Content: Julia Mullen

Education Content: David Henty

Computational Science Education: Katherine Cahill

Computational Science Education: David Joiner

Workshop: Nitin Sukhija

Workshop: Nia Alexandrov

Outreach: Weronika Fillinger

Outreach: Steven Gordon

Systems Professional: Jenett Harrell

Systems Professional: Shelley Tillotson

K12: Dhruva Chakravorty

K12: Alistair Grant

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SIG HPC Education – The Activities

Committees are at work on...

Education Content:

- curating lists of available education and training materials for HPC and computational science skills.

Computational Science Education:

- developing strategies to incorporate and/or enhance computational science education at all levels of education

SIG HPC Education – The Activities

Committees are at work on...

K12:

- supporting educators introducing HPC & Data Science concepts in pre-university settings.

Systems Professionals:

- identification and promotion of materials geared towards initial entry and professional development of the wide range of professionals who help to manage HPC systems.

SIG HPC Education – The Activities

Committees are at work on...

Workshops:

- coordinating and managing in-person and virtual events to bring together the community to discuss topics of interest

Outreach:

- distributing information about the activities of the chapter, including advertising workshops, recruiting webinar speakers and blog entries.

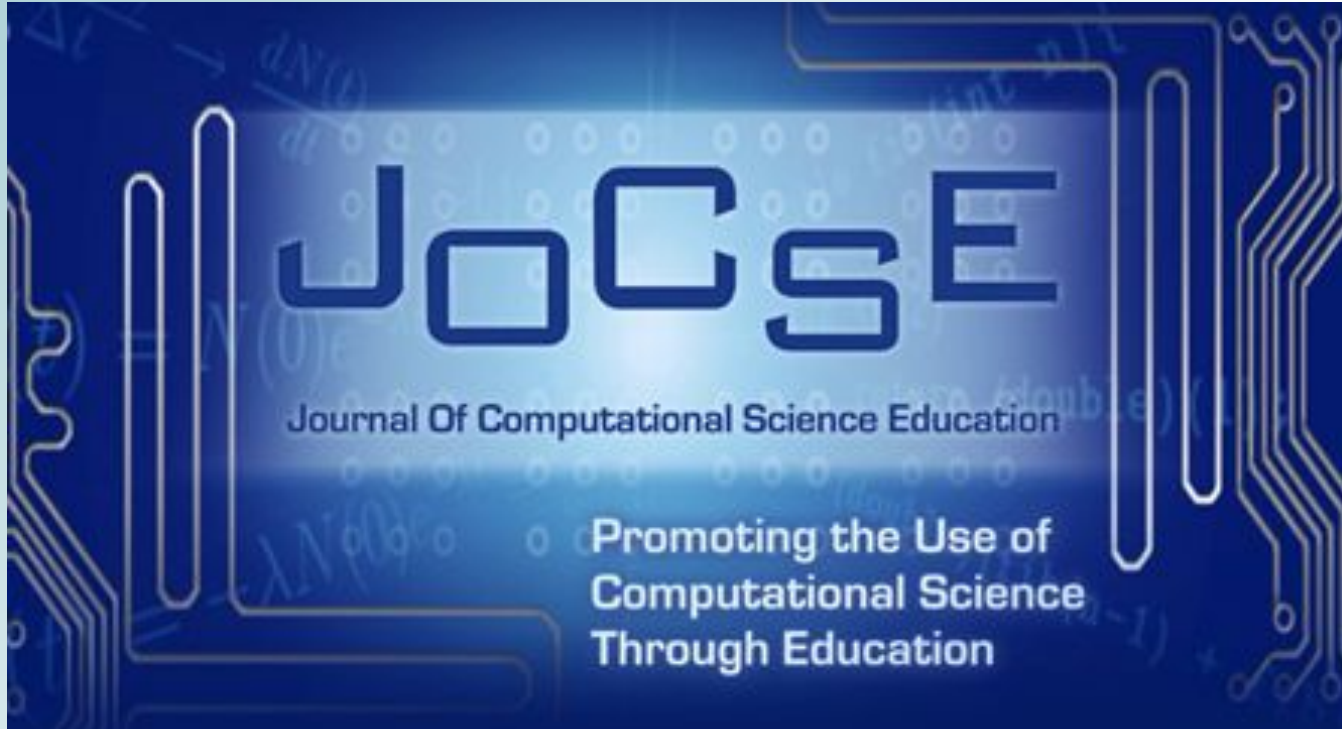
Recent Accomplishments

Seventh SC Workshop on Best Practices for HPC Training and Education (BPHTE20)@ SC20

Third Workshop on Strategies for Enhancing HPC Education and Training (SEHET20) @ PEARC20

Workshop on HPC Education and Training for Emerging Technologies (HETET19) @ ISC19

JOCSE.org



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Recent Accomplishments

Webinars:

- Choosing Accessible Conferencing and Chat Platforms
- Incorporating High Performance Computing in a Physics Curriculum
- Efforts to integrate computational science into the undergraduate curriculum
- Integrating Computational Science into the Chemistry Curriculum
- Mentoring: Maximize Your Impact
- Using flipped classroom and Jupiter Notebooks to teach undergraduates parallel programming

Recent Accomplishments

Other Activities

- Coordination with HPC Certification Forum to develop HPC skill tree
- Assembling references to training materials for educators and Systems professionals
- Sharing information on K-12 outreach and education efforts

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Current Opportunities

- ACM SIGHPC/Intel Computational & Data Science Fellowships
 - \$15,000 fellowship to increase diversity in computational and data science
 - 12 Awards announced in 2020
 - New round of fellowships 2021
 - Submissions open March 15
 - Close on April 15
 - <https://www.sighpc.org/fellowships>

<https://sighpceducation.acm.org>

Chapter Education Award

- For outstanding contributions in education for:
 - Computational and data-enabled science
 - HPC Education and Training
 - Across all disciplines
 - Awards to be made in Spring/Summer 2021
 - One awardee and two runners-up
- Draft criteria <https://sighpceducation.acm.org/edaward>
- Volunteers should contact officers@sighpceducation.acm.org

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Award Committee

- Need volunteers for award committee
 - Draft expanded description of award criteria
 - Establish nomination process
 - Establish a rubric for judging nominations
 - Establish and implement a voting procedure
 - Make final recommendations to the SIGHPC Education Chapter Officers

How Can You Help?

- Be a leader
 - Join one of the committees and share your expertise.
 - Submit your name for one of the officer positions.
- Be a contributor
 - You have important ideas, techniques, and approaches that need publicity – write a blog post.
 - You have great training materials - send us the links.
 - Got an important announcement related to HPC education or training? Send email and the officers will disseminate if approved.

Officer Elections

The officers of this Chapter shall be: Chair, Vice Chair, and Secretary. These officers constitute the Council. Other officers may also be established.

The officers shall be elected by a plurality of the votes cast at the annual election meeting to be held in May. They shall take office on May 15th and serve for one year.



Association for
Computing Machinery

You're invited to the community – join us!

<https://sighpceducation.acm.org>

officers@sighpceducation.acm.org

** Chapter members do not need to be members of ACM or enrolled with an educational institution. Membership is \$10 for professionals and \$5 for students

<https://sighpceducation.acm.org>

