

SIGHPC Education Chapter

Chapter Overview
Steven Gordon, Chair

Chapter Purpose

- Promotion of interest in and knowledge of applications of High Performance Computing
 - Promote an increased knowledge of the educational and scientific aspects of HPC and their applications.
 - Communication among individuals having an interest in education and career building.
 - Conduct and promote formal and informal education activities
 - Provide guidance to the community on the competencies for computational modeling, simulation, data analysis, and visualization techniques.
 - Provide information on quality educational programs and materials

Current Officers

- Chair – Steven Gordon
 - Professor Emeritus, Ohio State University and Senior Education Lead, Ohio Supercomputer Center
- Vice Chair – David Halstead
 - CIO and Head of IT National Radio Astronomy Observatory
- Secretary/Treasurer – Deborah Schwartz
 - Associate Director for Next Generation Workforce Development, DoD High Performance Computing Modernization Program

Next Organizational Steps

- Opening on board for member at large
 - Send nominations to Steve Gordon (sgordon20@gmail.com) with the name and contact information for the nominee
 - Will create a slate of candidates and conduct an election online
- Future virtual meetings
 - Using Google Hangout on Air
 - Announcement of meetings sent to member list

Joining the Chapter

- Membership is cheap
 - \$10 regular member
 - \$5 for students
- Go to <http://sighpceducation.acm.org/>
 - Link to membership site on membership tab

Variety of topics

- Academic programs in computational science and data science
- Certificate programs
- Competencies and skill requirements for professionals

Current Academic Programs

- Review of academic program models at different institutions
 - Undergraduate minors and concentrations
 - Graduate programs
- Variety of program foci
 - Multi-disciplinary programs
 - Focus on one or two disciplines (e.g. bioinformatics)
 - Data science programs

Certificate Programs

- Programs at academic institutions
- Certification through various projects and not-for-profit institutions for example
 - Software carpentry
 - XSEDE training
- Continuing Education
 - Making programs available to current professionals
 - “Training on demand”
- Needs for additional programs
- Should there be some accreditation of programs?

Competencies

- Defining what skills are required
 - Undergraduate programs
 - Graduate and professional programs
- Technical skills
- Domain knowledge
- Possible endorsement of skill sets

Proposed Activities

- Monthly webinars on a variety of topics
 - Discussion of computational science skills needed in workforce and possible certification efforts
 - Curriculum examples – from existing undergraduate and graduate programs
 - Curriculum in newer data science programs
 - Review of available training and education materials
 - Other?
- Quarterly newsletter
- Special interest groups on education and training topics

Need Your Suggestions

- Topics for discussion
- Possible speakers
- Other suggestions for communications for this virtual chapter