# 2017 IHPCSS Student Post Survey Response, N=80

IHPCSS Student Post Survey
February 15th 2018, 1:39 pm MST

# Q1 - To what extent do you agree with the following statements regarding your experience in the International HPC Summer School?

#	Question	Strong ly disagr ee		Disagree		Neutral		Agree		Strongly agree		Total
1	My goals for attending the international HPC Summer School were achieved	0%	0	2%	1	12%	8	55%	36	32%	21	66
2	The summer school was well organized	0%	0	0%	0	5%	3	36%	24	59%	39	66
3	I am satisfied with the delivery format of the summer school	0%	0	5%	3	6%	4	53%	35	36%	24	66
4	I am satisfied with my interaction with my mentor during the mentoring/work sessions	0%	0	3%	2	14%	9	24%	16	59%	39	66
5	I meaningfully engaged with a mentor during the summer school	2%	1	3%	2	14%	9	29%	19	53%	35	66
6	I plan on keeping in contact with my mentor after the summer school	2%	1	6%	4	18%	12	35%	23	39%	26	66
7	I plan on keeping in contact with a staff member after the summer school	2%	1	6%	4	23%	15	41%	27	29%	19	66
8	I am satisfied with the student/mentor matching process	2%	1	3%	2	23%	15	33%	22	39%	26	66
9	I meaningfully engaged with other students at the summer school	0%	0	3%	2	2%	1	32%	21	64%	42	66
10	The fact that students from other countries participated in the summer school	0%	0	2%	1	6%	4	30%	20	62%	41	66

	contributed to my learning											
11	The knowledge/skills I gained during this summer school will significantly contribute to my work/research	2%	1	0%	0	11%	7	41%	27	47%	31	66
12	I know the next step for me to build on what I learned at this summer school	0%	0	2%	1	20%	13	36%	24	42%	28	66
13	I am interested in learning more about the resources/opportunitie s available through Compute/Calcul Canada, PRACE, RIKEN, or XSEDE as a result of this experience	0%	0	2%	1	6%	4	36%	24	56%	37	66
14	I plan on obtaining (or currently have) access to Compute/Calcul Canada, PRACE, RIKEN, or XSEDE resources	0%	0	2%	1	9%	6	32%	21	57%	37	65
15	The lodging was adequate	2%	1	5%	3	6%	4	49%	32	38%	25	65
16	Overall I would rate my experience as successful	0%	0	0%	0	8%	5	24%	16	68%	45	66

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	My goals for attending the international HPC Summer School were achieved	2.00	5.00	4.17	0.69	66
2	The summer school was well organized	3.00	5.00	4.55	0.58	66
3	I am satisfied with the delivery format of the summer school	2.00	5.00	4.21	0.75	66
4	I am satisfied with my interaction with my mentor during the mentoring/work sessions	2.00	5.00	4.39	0.83	66
5	I meaningfully engaged with a mentor during the summer school	1.00	5.00	4.29	0.92	66
6	I plan on keeping in contact with my mentor after the summer school	1.00	5.00	4.05	0.98	66
7	I plan on keeping in contact with a staff member after the summer school	1.00	5.00	3.89	0.94	66

8	I am satisfied with the student/mentor matching process	1.00	5.00	4.06	0.94	66
9	I meaningfully engaged with other students at the summer school	2.00	5.00	4.56	0.68	66
10	The fact that students from other countries participated in the summer school contributed to my learning	2.00	5.00	4.53	0.68	66
11	The knowledge/skills I gained during this summer school will significantly contribute to my work/research	1.00	5.00	4.32	0.78	66
12	I know the next step for me to build on what I learned at this summer school	2.00	5.00	4.20	0.80	66
13	I am interested in learning more about the resources/opportunities available through Compute/Calcul Canada, PRACE, RIKEN, or XSEDE as a result of this experience	2.00	5.00	4.47	0.68	66
14	I plan on obtaining (or currently have) access to Compute/Calcul Canada, PRACE, RIKEN, or XSEDE resources	2.00	5.00	4.45	0.72	65
15	The lodging was adequate	1.00	5.00	4.18	0.86	65
16	Overall I would rate my experience as successful	3.00	5.00	4.61	0.62	66

#### Q2 - If you selected "disagree" or "strongly disagree" please explain here.

If you selected "disagree" or "strongly disagree" please explain here.

I disagree with the format because I consider that the Hands On sessions weren't truly hands on (except for the first one). I believe that having hands on session is important to learn the concepts in an active way. Otherwise, everyone lost track after an hour of lecturing.

#### Thanks for everything

We were suppose to know the basics before the beginning of the Summer School (or so we were told in the emails we received from the organizers). Too much time was wasted go over concepts like MPI, OpenMP, etc. That time could have been spent in more advanced topics. Also, I would have loved to learn more about debugging tools since, as a student, I spend most of my time debugging code.

The lodging location and the dining were great. The only issue with the lodging was the quality of the bed. The room was clean, the bathroom great for a week.

I didn't really connect strongly with my mentor, and while I learned a lot from the staff, I don't think it's likely I'll be maintaining very much contact. Perhaps I will reach out to them in the future, but I don't have current plans to.

The beds in the dorms were horrible.

Bathroom in the hall was very unexpected and did not contribute to good rest.

My personal mentor was not very helpful for me, but the other mentors were.

Please do a track next time about Start Up using HPC, some people wanna make companies out of HPC knowledge.

It's always hard to keep in touch with people after events like this. If the situation arises, I will likely be in touch with some friends from the week or with my mentor, but I wouldn't be surprised if that didn't happen.

I would really appreciate more hands-on skill development, which was the primary reason I attended. This was not emphasized to the degree I had hoped. Personally speaking, more emphasis on melding high-level languages/tools (e.g. Python) with HPC would have been helpful, and a focus on data analysis with HPC.

I was not incredibly impressed with the style of the hands-on sessions. There was far too much lecturing, and far too little hands-on exercises, in most of them. This makes it difficult to retain the information conveyed in those sessions.

I would have preferred more hands-on sessions and less mentoring activities.

It was a pity to have to choose between classic track and accelerators;

the presentations about applications of HPC in different scientific areas are not so useful

The dorm rooms were not great, particularly the mattresses. I haven't slept well during this entire school.

## Q3 - How valuable did you find the following events/activities on Monday?

#	Question	Not at all valuab le		Somewhat valuable		Neutral		Valuable		Very valuable		Total
1	Testing of course accounts	2%	1	7%	4	29%	16	36%	20	25%	14	55
2	Keynote, Amanda Randles (Duke University)	3%	2	5%	3	15%	9	39%	24	39%	24	62
3	Parallel programming methodologies and Introduction to parallel programming challenge, John Urbanic (PSC)	0%	0	2%	1	10%	6	42%	26	47%	29	62
4	Introduction to mentoring, Scott Callaghan (USC) & Elsa Gonsiorowski (LLNL)	2%	1	3%	2	21%	13	50%	31	24%	15	62
5	Hands-on session: Parallel programming: classic track (MPI & OpenMP), David Henty (EPCC)	0%	0	2%	1	0%	0	44%	19	53%	23	43
6	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	0%	0	0%	0	3%	1	21%	7	76%	25	33
7	Dinner buffet and Electronic Poster Session I	0%	0	3%	2	11%	7	50%	31	35%	22	62

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	Testing of course accounts	1.00	5.00	3.76	0.97	55
2	Keynote, Amanda Randles (Duke University)	1.00	5.00	4.05	1.01	62
3	Parallel programming methodologies and	2.00	5.00	4.34	0.72	62

	Introduction to parallel programming challenge, John Urbanic (PSC)					
4	Introduction to mentoring, Scott Callaghan (USC) & Elsa Gonsiorowski (LLNL)	1.00	5.00	3.92	0.85	62
5	Hands-on session: Parallel programming: classic track (MPI & Camp; OpenMP), David Henty (EPCC)	2.00	5.00	4.49	0.62	43
6	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	3.00	5.00	4.73	0.51	33
7	Dinner buffet and Electronic Poster Session I	2.00	5.00	4.18	0.75	62

## Q4 - How valuable did you find the following events/activities on Tuesday?

#	Question	Not at all valuab le		Somewhat valuable		Neutral		Valuable		Very valuable		Total
2	Overview of ComputeCanada, PRACE, RIKEN, XSEDE, Ramses van Zon, Hermann Lederer, Toshiyuki Imamura, John Towns	2%	1	10%	6	20%	12	41%	24	27%	16	59
3	High Performance Data Analytics, Neal McBurnett, Independent Consultant in Data Science, Election Integrity, etc.	5%	3	9%	5	27%	15	40%	22	18%	10	55
4	HPC Challenges in Plasma and Astrophysics, Frank Jenko, IPP, Germany and UCLA, US	9%	2	5%	1	14%	3	27%	6	45%	10	22
5	Workflow tools, Scott Callaghan, University of Southern California	0%	0	4%	2	18%	9	49%	25	29%	15	51
6	Hands-on session: Parallel programming: classic track (MPI & OpenMP), David Henty (EPCC)	2%	1	2%	1	2%	1	40%	17	53%	23	43
7	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	0%	0	3%	1	10%	3	34%	10	52%	15	29
8	Dinner buffet and Electronic Poster Session II	0%	0	3%	2	11%	7	44%	27	42%	26	62

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	Overview of ComputeCanada, PRACE, RIKEN, XSEDE, Ramses van Zon, Hermann Lederer, Toshiyuki Imamura, John Towns	1.00	5.00	3.81	1.00	59
2	High Performance Data Analytics, Neal McBurnett, Independent Consultant in Data Science, Election Integrity, etc.	1.00	5.00	3.56	1.06	55
3	HPC Challenges in Plasma and Astrophysics, Frank Jenko, IPP, Germany and UCLA, US	1.00	5.00	3.95	1.26	22
4	Workflow tools, Scott Callaghan, University of Southern California	2.00	5.00	4.04	0.79	51
5	Hands-on session: Parallel programming: classic track (MPI & Camp; OpenMP), David Henty (EPCC)	1.00	5.00	4.40	0.84	43
6	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	2.00	5.00	4.34	0.80	29
7	Dinner buffet and Electronic Poster Session II	2.00	5.00	4.24	0.78	62

## Q5 - How valuable did you find the following events/activities on Wednesday?

#	Question	Not at all valuab le		Somewhat valuable		Neutral		Valuable		Very valuable		Total
2	HPC approaches in Life Sciences, Erik Lindahl (Univ. Stockholm, Sweden) and Tom Cheatham (Univ. Utah, US)	3%	1	5%	2	18%	7	47%	18	26%	10	38
3	HPC Challenges in Biomedical Engineering, Stephanie Termaath, University of Tennessee, Knoxville, TN, US	0%	0	10%	3	16%	5	48%	15	26%	8	31
4	HPC approaches to Genomic signal processing, Orly Alter, University of Utah, Salt Lake City, UT, US	3%	1	9%	3	30%	10	33%	11	24%	8	33
5	Hands-on session: Programming challenge Q&A, David Henty (EPCC)	6%	3	8%	4	27%	14	40%	21	19%	10	52
6	Mentoring session	0%	0	8%	5	13%	8	35%	21	43%	26	60
7	Hands-on session: Parallel programming: classic track (MPI & OpenMP), David Henty (EPCC)	0%	0	2%	1	2%	1	40%	17	55%	23	42
8	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	0%	0	13%	3	4%	1	35%	8	48%	11	23
9	Social Event/Dinner	0%	0	2%	1	7%	4	39%	24	52%	32	61

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	HPC approaches in Life Sciences, Erik Lindahl (Univ. Stockholm, Sweden) and Tom Cheatham (Univ. Utah, US)	1.00	5.00	3.89	0.94	38
2	HPC Challenges in Biomedical Engineering, Stephanie Termaath, University of Tennessee, Knoxville, TN, US	2.00	5.00	3.90	0.89	31
3	HPC approaches to Genomic signal processing, Orly Alter, University of Utah, Salt Lake City, UT, US	1.00	5.00	3.67	1.03	33
4	Hands-on session: Programming challenge Q&A, David Henty (EPCC)	1.00	5.00	3.60	1.06	52
5	Mentoring session	2.00	5.00	4.13	0.94	60
6	Hands-on session: Parallel programming: classic track (MPI & Samp; OpenMP), David Henty (EPCC)	2.00	5.00	4.48	0.66	42
7	Hands-on session: Parallel programming: accelerator track, John Urbanic (PSC)	2.00	5.00	4.17	1.01	23
8	Social Event/Dinner	2.00	5.00	4.43	0.69	61

## Q6 - How valuable did you find the following events/activities on Thursday?

#	Question	Not at all valuab le		Somewhat valuable		Neutral		Valuable		Very valuable		Total
3	HPC Challenges in Artificial Intelligence Research, Kazuki Yoshizoe, RIKEN Center for Advanced Intelligence Project	0%	0	10%	3	19%	6	39%	12	32%	10	31
4	A Brief History of Climate Modeling and its connection to HPC, Warren Washington, NCAR, Boulder, CO, US	0%	0	11%	4	8%	3	32%	12	49%	18	37
5	HPC Challenges in Materials Science, Taisuke Ozaki, U Tokyo, Japan	6%	1	6%	1	31%	5	38%	6	19%	3	16
6	Data-intensive computing and parallel I/O, Ritu Arora, TACC, US	3%	2	8%	5	27%	16	41%	24	20%	12	59
7	HPC software engineering, Erik Lindahl (Univ. Stockholm, Sweden)	0%	0	2%	1	18%	10	33%	18	47%	26	55
8	Mentoring session	0%	0	7%	4	15%	9	31%	19	48%	29	61
9	Hands-on session: Performance analysis and optimization, Phil Blood, PSC, US and Christian Feld, JSC, Germany	2%	1	11%	7	11%	7	34%	21	41%	25	61
10	Social Event/Dinner	0%	0	0%	0	2%	1	28%	16	70%	40	57

#	Field	Minimum	Maximum	Mean	Std Deviation	Cou
1	HPC Challenges in Artificial Intelligence Research, Kazuki Yoshizoe, RIKEN Center for Advanced Intelligence Project	2.00	5.00	3.94	0.95	;
2	A Brief History of Climate Modeling and its connection to HPC, Warren Washington, NCAR, Boulder, CO, US	2.00	5.00	4.19	0.98	
3	HPC Challenges in Materials Science, Taisuke Ozaki, U Tokyo, Japan	1.00	5.00	3.56	1.06	
4	Data-intensive computing and parallel I/O, Ritu Arora, TACC, US	1.00	5.00	3.66	1.00	
5	HPC software engineering, Erik Lindahl (Univ. Stockholm, Sweden)	2.00	5.00	4.25	0.81	
6	Mentoring session	2.00	5.00	4.20	0.92	
7	Hands-on session: Performance analysis and optimization, Phil Blood, PSC, US and Christian Feld, JSC, Germany	1.00	5.00	4.02	1.06	
8	Social Event/Dinner	3.00	5.00	4.68	0.50	

### Q7 - How valuable did you find the following events/activities on Friday?

#	Question	Not at all valuab le		Somewhat valuable		Neutral		Valuable		Very valuable		Total
2	Hands-on session: Performance analysis and optimization, Phil Blood, PSC, US and Christian Feld, JSC, Germany	1.69%	1	13.56%	8	13.56%	8	33.90%	20	37.29%	22	59
3	Mentoring session	3.33%	2	3.33%	2	20.00%	12	40.00%	24	33.33%	20	60
4	Hands-on session: Introduction to Spark, John Urbanic, PSC, US	0.00%	0	0.00%	0	14.29%	7	30.61%	15	55.10%	27	49
5	Bring-your-code Session: Open Source Software Engineering, Elsa Gonsiorowski, LLNL, US	0.00%	0	8.70%	2	8.70%	2	26.09%	6	56.52%	13	23

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	Hands-on session: Performance analysis and optimization, Phil Blood, PSC, US and Christian Feld, JSC, Germany	1.00	5.00	3.92	1.09	59
2	Mentoring session	1.00	5.00	3.97	0.98	60
3	Hands-on session: Introduction to Spark, John Urbanic, PSC, US	3.00	5.00	4.41	0.73	49
4	Bring-your-code Session: Open Source Software Engineering, Elsa Gonsiorowski, LLNL, US	2.00	5.00	4.30	0.95	23

Q8 - If you found any of the above activities to be "somewhat valuable" or "not at all valuable" please explain here.

If you found any of the above activities to be "somewhat valuable" or "not at all valuable" please explain here.

In the case of the Hands on session it was because they weren't truly hands on.

In the cases of the talks it was because most of them weren't from my area and even though they sound interesting they were hard to follow.

I found the classical track (MPI/OpenMP) too basic. I have learned a few things I was doing wrong in my research. I would have like to have time to talk about my research and ask direct questions on my code for example. I know it would have been very difficult to implement given the limited amount of time.

Also, regarding the programming challenge. I tried to participate in the challenge. However, the time was very limited and could not spend enough time on it.

on Wednesday tt there was no MPI/OpenMP and OpenACC section

I just couldn't get into the Performance analysis & optimization sessions. I'm not sure if the problem was my interests o the time of day or what, but I couldn't figure out how it was applying to me or what I would do with it. The "HPC Challenges in Plasma Physics/Astrophysics" session sounded like the ideal session for me, being an astrophysicist. However, it was so narrowly focused - the presenter discussed a code his group has developed, but the algorithm/application is very specific to nuclear reactors and unfortunately not at all applicable to astrophysical processes except in the study of very diffuse clouds (I don't know anyone at the conference who studied this). I was very disappointed that "Challenges in Astrophysics" was not actually discussed. What about other codes? What are the advantages/disadvantages of various methods?

The main take-away: Make sure the sessions don't get way too specific OR, if they do, then the title of the session should reflect that. This particular session should have been titled "The GENE Code: Towards whole device modeling of fusion systems." I was disappointed not to learn about current HPC challenges relevant to astrophysics in the broader context.

I want to put a plug-in here as well: Elsa's session on Open Source Software Engineering was excellent and a really great idea.

Finally, I think one more afternoon in the parallel MPI/Open-Mp and Accelerator sessions would have been great. I found them the most useful aspect of the summer school and I wanted more hands-on time during the session and some time to explore more advanced topics, which could be achieved by putting more sessions in parallel or subtracting some of the less useful sessions.

Those topics were not in my field, and though I respect their work, the presentations did little to motivate why understanding their methodologies would benefit my own understanding of HPC. I admit it's important to be aware of other fields using HPC so we can better advocate for it, but it's difficult to pay attention to these lectures when the material is beyond your expertise.

HPC in Data Analytics was too big-picture, and had too much in common with John Urbanic's Friday session to be valuable.

The High performance data analytics section had almost no useful content. Plus, John Urbanic covered Spark on Friday in a much much more relevant form. The first one felt redundant and unhelpful.

The talks on Wednesday morning were far too specific to be relevant. They talked about specific codes that I will never use and it wasn't in a context that would help me with other codes. This needs to be reformatted, in my opinion. For example, in the workflow tools session by Scott, he talked about an incredibly useful topic (workflow tools) but in the context of his work. I didn't need to know anything about seismological modeling to understand

why these tools were useful and felt that it would benefit me greatly to use them myself. I believe all talks in this school should be geared towards useful tools for students and the mentors can use their research context to frame them. The students' backgrounds are too diverse for such specific talks.

Performance analysis and optimizations hands on sessions were too focused for serious code development and testing. This session should be run in parallel with something else for students who will likely never need to do these sorts of performance measurements.

In general, my impression of the summer school is very good! However, I found a little bit basic the content, eg., MPI and OpenMP. I would have liked to learn more advanced techniques. For example, more efficient communication patterns in MPI.

Regarding the performance analysis sessions, I found them boring, because the class wasn't enough interactive and the lecturer's voice was very monotonic.

General comment about hands-on sessions:

I know this is such a difficult balance between teaching beginner information and teaching more advanced stuff. Time is limited too of course. But I wish we could have done more programming. Maybe it's as simple as making a morning session (9-10) each day where we can work on the hybrid challenge or other examples. I think that just \*seeing\* a list of clauses that are available (for example, "you can use private(), firstprivate(), ... etc") without trying each of them, it's hard for the material to "sink in". Small examples of some of the major features would be awesome.

With very little active learning (e.g. working out problems in a hands-on manner vs. listening to lectures and/or copying-and-pasting template code), I'm worried that most of what I learned will not be retained.

The Life sciences talk was somewhat valuable because I do not work in a field that is related to Life sciences.

First, I want to thank you folks for such a nice organization of this event. I think if you could reduce the amount of Keynote talks and try to increase the number of hands-on session (probably more popular ones) that would be a great a more productive idea for the next year summer school.

Thanks so much again for everything:)

The dinner at the brewery was underwhelming to say the least... Standing room only, way overheated, and mediocre food management.

# Q9 - How challenging did you find the summer school?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count	
1	How challenging did you find the summer school?	2.00	5.00	3.18	0.67	0.44	61	

#	Answer	%	Count
1	Very difficult	0.00%	0
2	Difficult	11.48%	7
3	Neutral	62.30%	38
4	Easy	22.95%	14
5	Very easy	3.28%	2
	Total	100%	61

#### Q10 - How is this program unique from other programs/trainings you have attended?

How is this program unique from other programs/trainings you have attended?

Pros: It has a mentor program that is really helpful.

Cons: Missing active learning, more hands on sessions and peer programming.

It gave a fantastic all round access to technical and mentoring resources, and I felt that the other participants as well as mentors and staff really cared for my well being. I can't express how helpful this event has been in my career.

mentoring style

The mentor system is indeed unique and the networking possibilities are huge. The HPC challenge is indeed a very good idea and should be further explored (more developed, maybe).

Much more specialized and higher level (in the sense of difficulty of topics addressed).

The mentoring program in this summer school is unique and very valuable. The staff was also very accessible and willing to spend time with the students. I have not participated in another summer school so far but I found the setup ideal to make new connections (professional or friend).

The program is very complex and also mentoring sessions make significant difference.

Relative to other conferences / workshops that I have attended, this program had a strong emphasis of networking and interaction between the participants - including both students and staff. Overall, I thought the summer school was excellent and will recommend it to my peers.

There were many interaction sessions including mentoring. Researchers from many research fields could communicate.

This is actually the first time I've gotten to go to a summer school, so it's different in that it's a week long and I traveled to it. I also think it's cool that there are so many fields represented here, not just other people in my field.

useful hands-on section

Well organized and prepared. Very divers

The breadth of backgrounds of all the students, both in skill level in HPC and in their science field. This aspect is extremely valuable.

Summer school was very uniquely organized. Student-Mentor format and opportunity for the former students to participate in the future summer school as a mentor is extremely good idea and distinguishes the event. The international aspect was very well implemented and through this, plus the excellent organizational skills of the organizers, social interactions amongst attendees was very much encouraged. This school provided the best opportunity I've seen to meaningfully interact with fellow students and scientists beyond the lectures and poster presentations.

In this program, I interacted the most with other attendees. In addition, no other summer school offers individual mentoring sessions. Therefore, I believe this program is quite unique. Thank you.

The mentoring component was unexpectedly great.

This program was much longer in terms of duration and very hands on compared to other programs I have attended. The mentors were very effective and efficient in helping with problems too.

It is very interactive

It's well tailored for students to learn new skills rather than just dump a lot of information about other people's work. Mentoring was very unique.

Very diverse!

It was more diverse in the applications of HPC and it had an amazing Mentor component

It was the most useful of all summer schools I have attended because it really focused on the content that we would need to succeed. The MPI and OpenMP and Spark hands on sessions were really well done and much better than any hands on sessions I have experienced in other schools. The organizers and presenters did, for the most part, a really fantastic job.

Being international was a big advantage.

The wide range of participants' background.

Participation of students from many different countries.

Very well organized and very diverse topic of the talks

- The international origin of the attendees
- It is a unique expense-paid HPC event (at least that I know)
- The mentoring experience

We were all from different departments and backgrounds; I liked that a lot. The networking a discussions together were awesome.

We got a really nice overview of a lot of topics.

Great people, very well organized. You really have the opportunity to build a network and interact with other students or mentors. A great variety of interesting topics have been covered and I had the possibility to exchange ideas about my future career and my next steps.

This program is very useful especially openACC. This help me so much in my Ph.D research

I found the mentoring a unique experience!

Opportunity to meet and work with researchers from all over the world

integration of career mentoring with technical skill development and presentation of work (e.g. poster session)

Mentoring activity and social events

The mentoring sessions were an aspect that I had not attended before. I really enjoyed the advice and perspectives of researchers at different stages of their lives.

I have never attended a program or training that was related to High Performance Computing. Therefore, I learned a lot from the speakers and also from my peers that have more experience in the field.

Great contact with mentors and other srudents, and genuine interest to keep in touch.

First program I attend

Better explanation, but not as much hands on

To me, it was one of a kind. The diversity and friendship atmosphere of the event made it very helpful to learn a lot of essential and important skills in the HPC field. I have never had such a nice experience and do appreciate all the efforts you folks put for this event.

It is very unique, and in a very good sense! It is not just series of trainings on HPC, but also networking and interaction with successful scientists, and this is very important for us.

More hands-on, and a high priority on networking and social activities.

The international feature and various directions.

The exposure of international students and staff is the best attribute of the program imo.

The breadth of subject domains here and the focus on many aspects of HPC.

The length of the program and the opportunities in meeting new people that have the same interests. This helps into gaining different perspectives on the problems I face in my research. The social character of the event was by far superior to other events I had followed and the mentoring sessions were really helpful.

More international students and profs from the whole world

It was very well organized, had a variety of mentors with a rate of 1 mentor to 3-4 mentees, multi-national, introduced me to multiple HPC topics

It was much larger of a program than another program I attended in 2015. Everybody was very sociable and the environment was very friendly and enjoyable.

Very well-selected, well-performed presentations/lessons, interesting mentoring!

However, the ressources provided for the HPC challenge did not work well...

## Q11 - Have you previously applied to this summer school?

#	Answer	%	Count
1	Yes, one time	16.39%	10
2	Yes, two or more times	1.64%	1
3	No, this is the first time I have applied	81.97%	50
	Total	100%	61

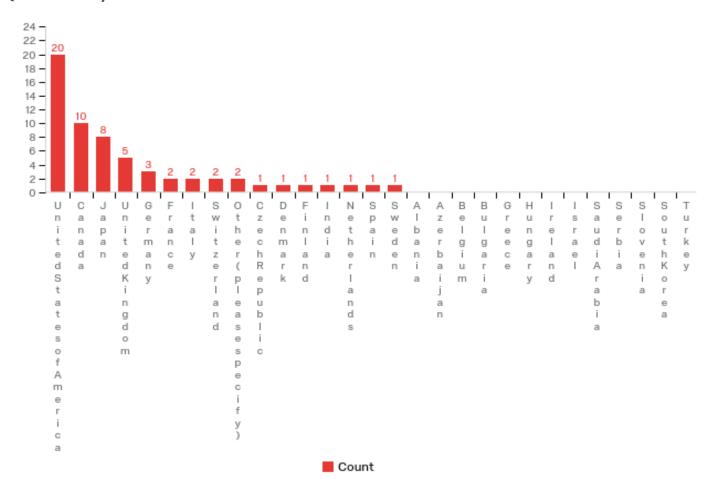
## Q12 - Would you be interested in returning to the summer school as a mentor?

#	Answer	%	Count
1	Yes	83.61%	51
2	No	16.39%	10
	Total	100%	61

#### Q17 - Gender:

#	Answer	%	Count
1	Male	75.41%	46
2	Female	24.59%	15
	Total	100%	61

#### Q13 - Country of residence



#### Q13\_29\_TEXT - Other (please specify)

Other (please specify) - Text	
Poland	
Austria	

### Q14 - Race/ethnicity for US participants (select all that apply)

#	Answer	%	Count
4	Hispanic or Latino	32%	7
6	White	27%	6
2	Asian	18%	4
7	Other (please specify)	18%	4
3	Black or African American	5%	1
1	American Indian or Alaska Native	0%	0
5	Native Hawaiian or Other Pacific Islander	0%	0
	Total	100%	22

### Other (please specify)

Other (please specify) - Text	
Egyptian	
Mixed	
Middle Eastern	
Middle Eastern	

Q15 - Please note any additional comments you would like to make regarding the International HPC Summer School or it's sponsor organizations, Compute/Calcul Canada, PRACE, RIKEN AICS, and XSEDE.

Please note any additional comments you would like to make regarding the International HPC Summer School or it's sponsor organizations, Compute/Calcul Canada, PRACE, RIKEN AICS, and XSEDE.

It would be interesting adding a Code of Conduct so everyone is in the same page regarding how to behave in an environment that has people from all around the world.

In this survey when you ask for Gender, you are only providing 2 options (female, Male), this can be rude to transgender people or people that don't identify themselves with any gender.

My only comment is one that I'm sure the organizers are aware of and are making efforts to deal with, but as its a difficult and complicated issue, I just thought I'd share my point of view. It relates to the level of the discussion/hands on sessions and the variety of experience levels of the participants. Personally, I benefitted greatly from the hands on sessions the first few days, especially in conjunction with the HPC coding challenge. This meant that I was able to take what I learned in the course and apply it on my own time, then discuss with the organizers/experts once I had some questions. (Actually, I did my best to follow both the Accelerator track and the Classic track, as I am interested in both kinds of coding. I tried to attend both sessions on different days and fill in the blanks by talking to people.) I would really have liked if then I could have carried that hands on knowledge forward and begin to develop an in-depth understanding of the low level architecture and machine level instructions I was invoking through my code, and how to optimize in this context. I feel like this was the idea of then following with the "profiling" hands on sessions, but I felt like the continuity was slightly broken between the two sessions. It was mentioned that we "could" use the skills we were learning there on the HPC coding challenge, but no time was really allotted to implement, debug, and absorb these ideas. Quite often more advanced ideas, related to architecture for example, were presented as "tidbits" that could be caught by those already prepared to digest this information, but lost on less experienced students. I personally would have greatly appreciated more of a development towards this stage.

I know the budget is very limited, but a couple of extra days would have been great to have more time to apply the material learned to the programming challenge and to our own research topic. Maybe having the time to do one activity other than HPC (hiking for example) would have been appreciated. But If time does not allow it, the program was very interesting and valuable.

I really appreciate your supports.

Liked the overview of the resources available to us

Thank you so much for organising this summer school. One can really notice your effort and work to organise IHPCSS17.

I loved the summer school. The organizers did a fantastic job. I'll offer some suggestions, only because I think one would be appreciated: the last two OpenACC hands on sessions were much less hands on than expected/ than could have been.

#### Thanks!

This summer school was very important to me. I learned a lot, and it also built my confidence in HPC and data science in general. However, there could have been more direct representation from Africa. I know a couple of HPC centers in Africa (precisely Ghana and South Africa). If there is any way to increase direct representation from the African continent, I am happy to help.

Thank you very much for your all work and efforts. It was one of the best trainings&social programmes that i have ever attended.

#### Thank you very much! It was great

I found that in the talks, there was a lot of gendered pronoun use favored to males (i.e., computer programmers always being gendered male, images of programmers in presentations being male, etc.). I had actually brought up this issue separately with my mentor and another staff member (both males) and both passed it off as being a non-issue because it "could be much worse than it is". This was insulting and felt as though the only reason the IHPCSS wanted women and diverse people to attend was to increase their statistics for next year's funding. It also made me feel that my mentor was not an advocate for me and I will probably be reluctant to reach out to him in the future.

I ended up having a very personal chat with Stephanie (a staff member whom I hadn't talked with until this conversation) about this exact issue and how frustrated I was about the responses from other staff and mentors. She was incredible. She immediately validated my concerns, asked me how this could be improved, and we brainstormed ideas on how to make women feel more welcome. We collectively decided that having an informal session on diversity in HPC where people could talk about issues they've faced and how they've dealt with them would really benefit many underrepresented groups at the summer school. Additionally, I feel that the summer school organizers should have a talk with all presenters prior to the school about the use of inclusive language and representing women and other underrepresented groups in a favorable way. This could further be brought up in the welcome reception so students are aware of how to be inclusive.

I have been using MPI+OpenMP for a while now, so I knew the basics. It would be better to have two sessions in parallel, elementary MPI+OpenMP session and advanced session for that. Dr. David Henty is an expert in this area and I could learn more if there was an advanced session too.

I would like to have more time to work on exercises during the hands on sessions. The lectures were too long and we didn't have much time to work on exercises.

It would be awesome to have a "HPC Starter Kit" series where we can have special time for setting up a true environment that would facilitate the use of HPC tools on our own machines. This would specifically focus on "developing HPC apps on local machines" (and not focus on actual job submissions to supercomputer). Anything related to "Getting Started with HPC" would be really helpful for those of us who have not had a chance to use HPC in our own research yet.

This HPC Summer School has been great.

Only flaw: we really did not have time to work on the challenge. I would even give more Hands-on sessions and less talk. Maybe you can arrange many parallel talk (like three or four parallel talks on different topics, instead of only 2 parallel talks) and obtain more time spots for hand-on sessions and the challenge.

#### **Great Events**

I feel that the following were extremely useful, in order:

- 1. Mentoring: This was an excellent experience for me. I feel much more confident in taking my next career steps, after talking to people and realizing that there are a lot of commonalities between us. Simply coming here for the mentoring part would have been worth it in itself.
- 2. Hands-on-tutorials: They were really helpful, especially the ones on OpenACC and Python.

Very well organized summer school! Hats off to the organizers. I would definitely recommend this to others planning on research careers in HPC.

I felt that the hands on sessions did not have enough hands-on in them, meaning examples that we could work on. This was probably due to the time constraints which I understand. But if more examples and hands-on aspects were introduced it would be a great addition to the school.

The school was really well organized. Everything went along really well.

I truly enjoyed this conference and learned so much about the field of High Performance Computing. All the attendees were very friendly and made it easy to ask questions about anything.

Very well organised. Really like the summer school. Thanks for everything!

I have to say that I am sincerely thankful and do appreciate the financial supports from Compute/Calcul Canada, PRACE, RIKEN AICS, and XSEDE for this productive and pleasing summer school. As an Iranian graduate students in U.S. who is interested in HPC, I should say that I learned very valuable skills and feel very happy and confident that you folks gave me this valuable opportunity. Besides the rewarding skills I learned here, I think now I feel more devoted to have more contributions to HPC community.

#### Ali

I enjoyed very much both lectures and interaction with mentors and participants of the summer school! Everything was well organized! I hope this is not my last IHPCSS summer school!

Having excursions in the area would be really awesome! For Boulder in particular, having a hiking picnic or something similar would have been wonderful.

It would be nice to have sessions concerning Intel Xeon Phi and not just GPU computing.

Please ask RIKEN to simplify the procedures for future summer school. It was painful and waste of time.

Really enjoyed the whole organization, I believe that I learned some important skill that I am looking forward to apply in my research. In addition, I enjoyed the networking with students and mentors around the world.

I very much enjoyed the scientific lectures given by many of the mentors and organizers, however I believe that I would have benefited a little bit more from a slight increase in the ratio of hands on sessions and lectures to the scientific talks. Otherwise, the summer school was a very enjoyable and beneficial experience. Thanks It would be good to provide the OpenACC and OpenMP/MPI track not in parallel, but sequential (perhaps parallel to life-science sessions or similars), since many students would have been interested attending both these sessions. Extend the lunch breaks to 1.5 hours, 1 hour is a bit less. And only as an idea, extend the summer school by one day without any lectures, e.g., saturday. Then, everybody would have enough time to work on the HPC challenge - in my opinion, it is important to try and train what we have learned, and the HPC challenge is a good opportunity for this.

However, it's a pity that the ressources provided for the HPC challenge did not work well - devoloping the code was really a pain when you have to wait for each run 2-15 minutes.