Report on MT Marathon 2018

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1 Aim

This report describes the 2018 MT Marathon organized by the Institute of Formal and Applied Linguistics (ÚFAL), Charles University in Prague. The Marathon was held in Prague in September 3–8, 2018.

This report summarizes the activity at the Marathon and provides detailed opinions of Marathon participants collected in a survey sent out one month after the Marathon using a web feedback form. A second call to collect answers in the form was sent out two months later.

The full text of the feedback form is available as Attachment A followed by a detailed summary of the responses in Attachment B.

2 Introduction

The 2018 Marathon was the thirteenth in the series, and the second one organized without any EU project governance or support. MT Marathon 2018 thus relied on sponsors: EAMT and Memsource providing funding for invited speakers and lecturers, for catering and for printing the PBML issue with MT Marathon papers.

The marathons traditionally mix introductory lectures and labs for newcomers, advanced research talks and, most importantly, projects. The overall aim is to foster the development and use of open source MT software.

The target audience of MT Marathons are MT developers, researchers and users.

There are four main parts to the MT Marathon:

- collaborative hacking projects,
- the open source convention, i.e. presentation of papers on new opensource tools for MT,
- the "summer" school with lectures and labs given by leading researchers in the field,
- invited talks on current MT-related topics.

The marathon website is available at www.statmt.org/mtm18 including the programme with links to video recordings wherever available.

3 The MT Marathon

3.1 Participation

The first call for participation in MTM18 was issued in May through standard mailing lists related to machine translation and also through Twitter and LinkedIn. The call was then repeated in June and the last call was sent a month before the event itself.

By the time the event started we had 72 registered participants (including invited speakers and lecturers and 9 on-site registrations). From the past we know that there can be also additional participants who arrive without registering. In the end, 11 of the registered people did not make it to Prague. In total, we had 70 attendees. The rate of "no-shows" was comparable to the previous years but we still find it acceptable, given that registration is free.

The participation in 2018 was similar as in previous years (e.g. 73 registered and 67 actually attendingk the 2015 edition). It is worth mentioning that the MT Marathon in Prague competed again with the MT Marathon in the Americas¹ which took place in Pittsburgh in May 21-25.

The feedback form results (submitted by 36 attendees, again about a half as we see across the years) provide a finer detail on participants: 58% are somehow affiliated with industry (researchers, developers, managers or taking more than one of these roles), 19% were postgraduate students and 6% were researchers in academia, see Appendix B for the breakdown per role. The ratio of participants from industry is particularly high this year and actually showing a steady growth: in 2015, 37% of participants reported this relation and in 2016, 44% did.

3.2 Projects

MTM open source projects are week-long hacking sessions, conducted in small groups formed on the first day, and aiming to implement or extend open source MT software, or to try out a new research idea. For those more experienced in the field, projects are the main business of the MTM.

We followed the past good experience and tried to collect project proposals in advance. In total, 13 projects were proposed in this list. This list both in its editable version as well as a snapshot in PDF are available from the corresponding MTM18 web page.²

¹http://www.statmt.org/mtma18

²http://ufal.mff.cuni.cz/mtm18/projects.html

The actual project groups were formed on Monday, after each proposer presented his or her project. What again worked particularly well, was to use the blackboard where project leaders indicated where they are waiting for prospective team members and everybody marked with a simple tick their interest in the various projects. This allowed project leaders to see if their team is likely to get sufficiently big, and perhaps also contributed to some "load balancing" since everybody saw which projects are going to be crowded.

The slides for all project sessions (boaster session on Monday, interim reports on Wednesday, final reports on Friday) are available in MTM18 SVN repository and linked from the programme web page³. Here are project titles from the final presentations:

- A WMT document level baseline (4 members)
- Finding and Extracting Parallel Data using Deep Learning (8 members)
- Hierarchical MT decoding (2 members)
- AMQP Worker Interface for Marian (1 member)
- A Neural Interlingua for MT (6 members)
- Neural Monkey Unsupervised (6 members)
- NMTInspector (3 members)
- Self-adaptive NMT for Sockeye or Marian (3 members)
- Universal transformer (3 members)

3.3 Open Source Convention: Papers

The call for papers asked for submissions describing new open source MT software, and extensions to existing tools. This call gives MT researchers and developers the opportunity to share information about implementation, and to publicise their software – an opportunity which is generally not available at typical research conferences. The accepted papers are published in the Prague Bulletin for Mathematical Linguistics (PBML)⁴.

In 2018, we received unfortunately only 2 submissions for this call. Both passed the review process and were accepted:

³http://ufal.mff.cuni.cz/mtm18/programme.html

⁴http://ufal.mff.cuni.cz/pbml

- Open Source Toolkit for Speech to Text Translation by Thomas Zenkel, Matthias Sperber, Jan Niehues, Markus Müller, Ngoc-Quan Pham, Sebastian Stüker, Alex Waibel
- NMT-Keras: a Very Flexible Toolkit with a Focus on Interactive NMT and Online Learning by Álvaro Peris, Francisco Casacuberta

Due to the low number of submissions, we offered the authors the choice between oral and poster presentations and both teams opted for the oral presentation.

We asked MTM participants in the feedback form to find out more about the reasons for the low number of submissions. The overall most common answer was that people would have liked to submit a paper but have not worked on any tool recently. Many answers also noted that there are multiple conferences (including ACL main ones) that have a demo track, which makes the competition hard for PBML. Also the fact that PBML is not indexed in Web of Science or Scopus makes it an inacceptable venue for some universities. One person also expressed his or her general scepticism about the impact of tool papers except for highly adopted tools.

3.4 Invited Talks

This year we had 5 invited talks:

- Tricks of the Trade, Orhan First (Google)
- Marian, Marcin Junezsys-Dowmunt (Microsoft)
- Argument Mining for MT, Elena Cabrio (Université Côte d'Azur, Inria)
- Opportunities for Machine Learning in the Translation Process, Aleš Tamchyna (Memsource)
- Multimodal MT, Lucia Specia (University of Sheffield / Imperial College London)

As customary, companies sponsored the travel costs for their presenting employees. The funding from EAMT and Memsource was used for the travel costs of Elena Cabrio and Lucia Specia.

The videorecordings from all the talks are available on MT Marathon 2018 web page.

3.5 "Summer" School

The summer school is a series of lectures with accompanying labs designed to provide a full introduction to statistical MT.

3.5.1 Lectures

The following is a list of the lectures in the summer school this year:

- Neural MT Basics I, David Vilar (Amazon)
- Neural MT Basics II, Rico Sennrich (University of Edinburgh)
- Discourse in MT, Christian Hardmeier (Uppsala University)
- Speech Translation, Jan Niehues (Karlsruhe Institute of Technology)
- MT Evaluation, Human Parity, Christian Federmann (Microsoft), remotely

Most of the lecturers arrived at their institution's expense. We used the EAMT and Memsource support for Christian Hardmeier's travel.

The lecture by Christian Federmann was given remotely and it worked out very well from the technical point of view.

3.5.2 Labs

This year we had four labs, two of which were updated instances of labs given in previous years:

- Neural Monkey Lab, Dušan Variš (Charles University)
- Marian Lab, Roman Grundkiewicz (University of Edinburgh)
- Inspecting NMT Models, Ondřej Cífka, Dušan Variš (Charles University), Jan Niehues (KIT)
- Deploying NMT in the cloud as in the SUMMA project, Ulrich Germann (University of Edinburgh)

4 Assessment

Based on the positive feedback from the participants, as available in Attachment B we are confident that MT Marathon 2018 was a successful event. Overall, 86% of the respondents are very much interested in taking part in the next MT Marathon. We are delighted to have received feedback again from almost half of the participants.

The attendance of the whole event and its parts was very good and the programme was broad enough to provide something for everyone at all levels.

The format of the event has been more or less stable throughout the years and the responses indicate that we can generally keep the current arrangement. The most changes were proposed for the labs (7 people proposed changes compared to 28 people being content with the current setup of labs), with people asking for indication of what background knowledge is expected, for more general labs on machine learning toolkits like pytorch or tensorflow, for instructions what to install beforehand or for labs for non-technical participants (e.g. a user session for a CAT tool).

Overall, we were very content with MT Marathon 2018 and we gratefully acknowledge the support from our sponsors: the European Association for Machine Translation (EAMT), Memsource and also Charles University for the venue.

A Feedback Form

The following pages contain the printed version of an online feedback form sent to all participants of MT Marathon 2018.

MT Marathon 2018 Feedback Form

* Required

Check all that apply.		nt occupation?						
undergrad (stu	undergrad (studying for Master)							
postgrad (stud	postgrad (studying for Ph.D.)							
postdoc (Ph.D	postdoc (Ph.D. finished, young researcher)							
researcher in a								
(small) acader								
translator in a company / freelancer								
researcher in a	a company							
developer in a								
manager in a o								
2. How do you feel al Marathon? Mark only one oval p		lowing tools/t	oolkits/environ	ments af	ter the MT			
	Knew well enough before	Confident I can use it on my own	Not afraid, but will seek assistance	Still afraid	Didn't use this during this Marathon			
Moses								
Nematus		$\overline{}$	\longrightarrow	\sim				
Neural Monkey								
Neural Monkey Marian								
Neural Monkey Marian Theano								
Neural Monkey Marian								

General Questions on Attendance

4.	How	much	did you	attend to	various	regular	MTM tracks?	*
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(sitting in the lecture theatre but working on a project counts as project work ;-) Mark only one oval per row.

	Did not attend (Did not want to)	Did not attend (But wanted to)	Intermittently	Fully involved	Fully involved and would have liked more
Introductory morning lectures					
Keynote talks					
Labs					
Work on projects					
Following other project reports					
General networking (meeting people)					

5. Is there anything you would suggest changing in next Marathons? *

There are text fields for detailed comments for each of the activities below. *Mark only one oval per row.*

	Keep	Change (details below)	Drop altogether	I don't care
Introductory lectures				
Keynote talks				
Labs				
Projects				
Project presentations				
Papers on tools				

Content Balance

6.	Comments on application/research balance Which of these short statements match your impressions? Use the next question to add more statements. Check all that apply.
	This MT Marathon had a good balance of MT research and MT applications. I would have liked to see more MT-based projects for end users-customers-
	consumers.
	It would be nice to have more companies around.
	I am happy about the general focus on research.
	More MT users (e.g. translators) should be invited to Marathons.
	Other:
	Please provide suggestions or comments on the balance of research vs. (commercial) applications.
8.	Comments on the Neural MT coverage at the Marathon Which of these short statements match your impressions? Use the next question to add more statements. Check all that apply. Great that you covered Neural MT this deep. I would have liked to have more lectures on NMT basics.
	I would have liked to have more pencil-and-paper exercises.
	I would have liked to have more coding labs.
	Non-neural MT did not receive proper attention.
	I knew NMT before but still learned a lot.
	I was disappointed by not learning much new.
9.	Anything further on Neural MT? Please provide suggestions or comments on the balance of NMT/non-NMT, they way NMT was covered

10.	NMT Model Training Time	
		kes longer than MT Marathon itself? Would this respect, compared to this year's labs
_		
De	tailed comments	
If yo	ou have any comments on each of the activi ot like? How could they be improved? (This	ties, please let us know. What did you like is the place to propose any changes.)
11.	Introductory lectures	
12.	Keynote talks	
13.	Labs	

14.	. Projects					
15.	. Project presentations					
16.	. Project follow-up reports					
	Some Marathon projects will run longer. We happen with them, but still: is there anything benefit more from such on-going projects?					
17.	. Paper on Tools (PBML)					
	This year, there were very few submissions of source tools. Which of these reasons explain from you? Check all that apply.					
	I would have liked to submit a paper, I j	ust had not worked on any tool recently				
	I missed the call for papers and then was too late.					
	I was actually planning to submit a paper, I just did not find the time.					
	Writing papers takes too much time, having papers published is not worth the effort for me.					
	I prefer to post it to arxiv at my pace, no	ot to wait for PBML/MTM annual call.				
	I prefer to post papers on tools to a differ field to specify the venue)	erent reviewed venue (use the Other				
	Other:					

18.	Papers on Tools (PBML) What would you suggest to increase the number of submissions we get? Or should we simply stop this track? Any other comments on the "Open Source Convention" track of MT Marathons?
<u>Or</u>	ganization
Plea	ase tell us more on your experience with the organization of the Marathon.
19.	Any comments on the organization or registration process?
20.	Was the information before Marathon sufficient? We tried to provide you with all relevant information on the web page just in time to help you in all decisions and steps. Was there anything missing? Would you like to have received more details, at different times or in a different manner?
21.	Social aspect Compared to previous years, this MT Marathon had a tremendous number of
	organized social events: two! Please let us know how you liked them, what was missing, what could have been done differently (assuming the same budget).

Anti-Harassment Policy

22. Did you notice anything that might be construed as harassment? Mark only one oval.
No
Yes
Other:
23. Should MT Marathons have an anti-harassment policy? Mark only one oval.
No
Yes
Other:
Next MT Marathon
There will be future MT Marathons. :-) You can maybe influence the future a little by your suggestions.
24. Would you come again?
Mark only one oval.
I will very likely attend the next MT Marathon, unless the location/timing /something is crazy.
I will seriously consider attending.
I am not likely to attend next year again, unless the location/timing/something really fits my desires.
Very likely, I won't be interested in any future MT Marathons.
Other:
25. Suggestions for MT Marathon Venue
The venue for the next MT Marathon is
being discussed (we do have a few

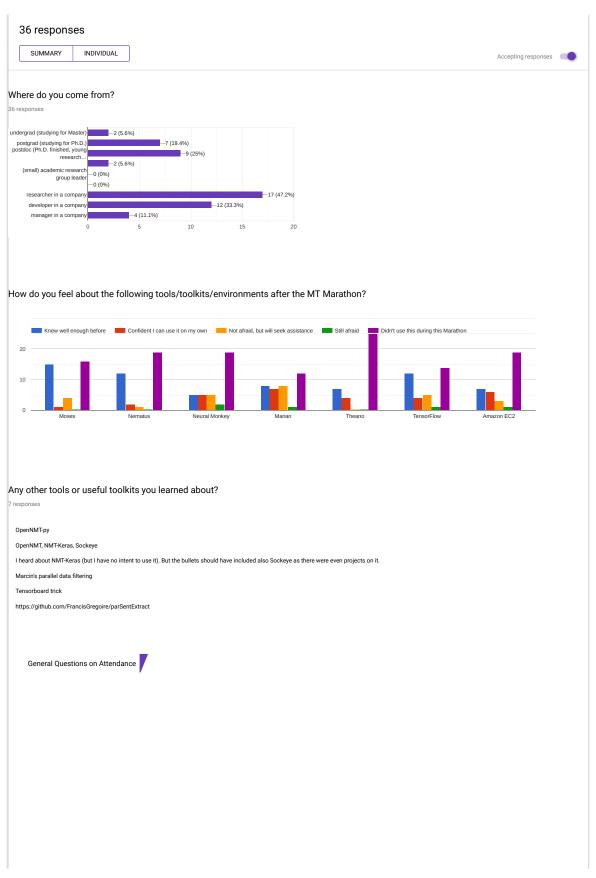
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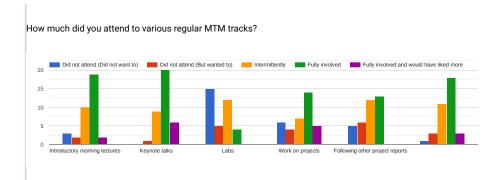
Google Forms

26. Registration Fees	
MT Marathons are not overly expensive but we still need sponsors to cover the coffee breaks etc. If we failed to get funding, would that be a problem for you? Mark only one oval.	
The registration fee would not affect my decision to come (if around 60-100 EUR).	
I would have to seek for a sponsor (incl. MT Marathon itself) to cover the fee for me.	
I would not attend if there was a fee.	
We are a rich company willing to take part of the costs, I am contacting you separately with our proposal.	
Anything to add?	
27. Anything you want to add? Any other comments? Any other impact or impression MT Marathon 2018 has made on you?	

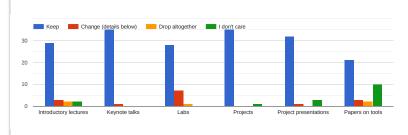
B Automatic Summary of Responses

The following pages contain the printed version of a detailed automatic summary of all the responses we collected using our online form.



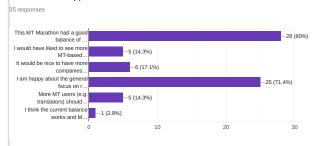


Is there anything you would suggest changing in next Marathons?



Content Balance

Comments on application/research balance



Anything further on research/application balance?

response

It would be nice to see bit more end-user applications and demos but not at the cost of reducing other program.

happy to see researchers from other fields also personally invited, happy to see discourse topics

As long as the research part has at least something on the current state-of-the-art, the balance should be fine.

While there was generally a good balance between MT research and MT applications/engineering issues, I sometimes felt the focus was too much on specific NMT frameworks. I would have liked to see more presentations like the one on discourse in MT, which is more conceptually oriented. For instance, I would be very interested in a presentation or lab on morphologically rich languages.

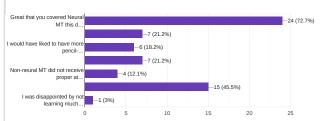
I'm not sure. In fact, I don't remember much from talks this year.

I think it is great that MTM is focused on research and developing of MT technologies. For end users there are other opportunities like Jeronýmovy dny, which are focused on user needs.

Please keep it as it is now.







Anything further on Neural MT?

3 responses

It would be good to have some labs on more advanced features and not just basics of the NMT toolkits. Also, experimental labs (like the NMT Inspector) do not really teach anything if there is no clear goal of the lab itself!

Sice NMT is currently the most developed technology, I think it is OK to focus on it.

It would be great to have other directions covered (if there are some which are still developing - say EBMT?)

NMT Model Training Time

1 responses

NMT models with small datasets such as multi30k can be trained in under 1 hour, and should provide reasonable proof of concept for most applications

It is a problem but not sure how to handle it.

Training a fully usable NMT model should not be a goal for labs. Lab organizers should provide a pre-trained model if it's needed to continue the labs.

I'd encourage the project proposal writers to consider the training time during writing the proposal - be it training on toy datasets, bringing pre-trained models, or just saying that the project will continue after the marathon and the on-site part is just to get it work.

It's reality. Do toy experiments at MTM and proper ones later.

Use Marian! You can get a decent result in a day (if convergence is not needed)!

No, it was good

No, it's fine. We used a small training data for our project and checked that everything was working correctly

I think the marathon is still useful in collecting collaborators on a given idea, but there is not really any time to finalize the experiments, so the projects should be more conceptual rather than expecting actual output.

The idea of working on projects during MTM is great, but indeed training time is a problem. It might be interesting to advise project leaders to run some trainings before MTM starts in order to gain time, but whether that makes sense depends on a project's goals.

I suppose for some projects it is problem, but since repositories are kept open and projects are encouraged to continue, I think, it is treated in acceptable way.

Detailed comments

Introductory lectures

4 responses

I didn't see any difference between lectures and keynotes so I'd unify this (the only "lectures" were those about NMT basics, I do not feel any difference in format e.g. between Speech Translation "lecture" and Multimodal MT "keynote").

I am probably too old already as I have seen the lectures already before (at least a couple of times). But they are important for the newcommers to the field!

As one of the lecturers of the introductory sessions, I had the feeling that most of the content was already known by the audience. New researchers nowadays start with NMT already, and old researchers have already made the transition. The situation was different a couple years ago, but nowadays probably the basics can be shortened.

I've been to tha MT Marathon 3 times now. I get the need for the introductory lectures but I wish they were on more advanced/different topics (at least a part of them)

Keynote talks

4 responses

Pity I did not note that slides of the very nice Orhan Firat's talk would not be published, I would make more notes:)

see comment above

The one about argument mining was irrelevant! I.e., please try to focus on MT research/applications in the future (or at least something that has strong enough relation with MT).

I like most of them, especially Tricks of the Trade and Multimodal MT.

Labs

responses

It should be more clear upfront the experience level for which the labs are designed

Maybe it would be nice to have labs for MT application users who are not that technical (for example, a lab with the Memsource tool presented in the talk, etc.)

I'd like to have a lab or a lecture on a general ML toolkit such as pytorch or tensorflow

Maybe it makes more sense to distribute the take-outs with instructions in advance, so users can try this on their own machines, and even apply to their project, and then will come to lab more for asking questions about the tools and it's use cases and turning, then just spend 1/3 of lab for installing and doing basic stuff.

Labs should be held as soon as possible. Looking at the programme, PBML paper presentations could be switched for example with the Marian lab.

Would be nice to have some more advanced options. I.e., to have hands-on experience on some cutting-edge new method. Rather than just - git clone -> install -> run HelloWorld.sh.

Maybe add some in-depth labs on the internal architecture of NMT-related tools and frameworks focused on developers and potential future contributors. Basically - show how stuff fits together within some tool to make it easy for someone to start backing on it

Too much copy-paste style. Also, I would like to make projects from scratch rather than using pre-installed applications – this way, I am not later able to repeat the tutorials at home.

Projects

responses

The facilities were great in general, but my team would have made good use of a modern projector and some extra screens, i.e. more of an open office-like setup.

SVN is a bit obsolete now, what about creating a github organization for MTM projects? Just an idea.

Very good that the MT Marathon attracts the developers of the best MT toolkits. This allows people to have face-to-face support during the projects.

I would really like if there were more space to work on our projects, the rooms were always packed and usually locked during the morning talks. It could be also nice to give groups some formal ways of receiving feedback from other attendees, maybe even some selected judges, to improve the communication and make it worthwhile coming to the marathon to propose a project.

There were regularly Wifi connection problems during the project work. Given the time constraints related to working on a project at MTM, it would be advisable to make sure there are sufficient network cables around

Project presentations

0 responses

No responses yet for this question.

Project follow-up reports

5 responses

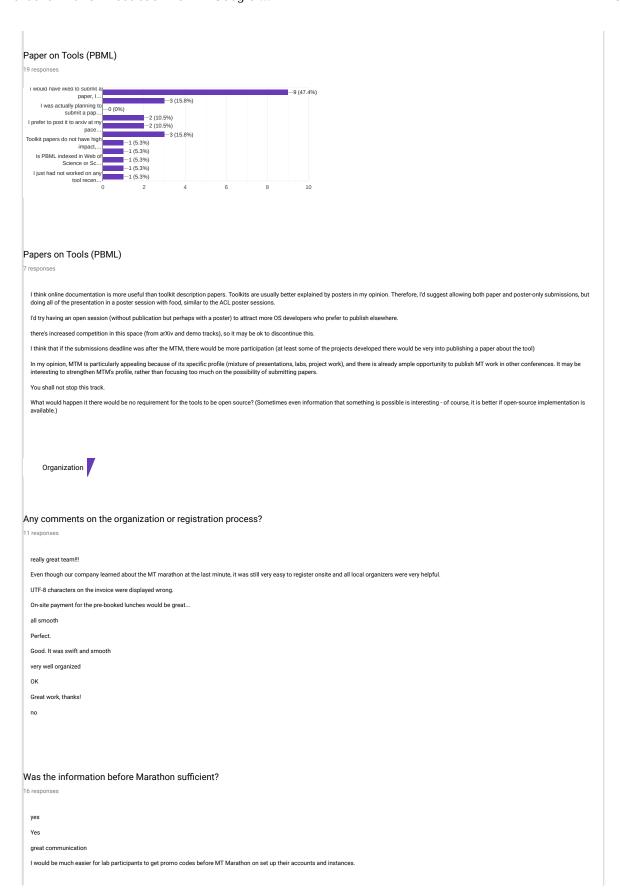
Perhaps a poster/oral session about the fate of the projects from the last marathon (if there were any).

Try to include some info about projects from the previous MTM that have been developed further

Maybe ask after 6 months to update whether there has been any new progress beyond the Marathon (in the form of 2 slides or so)?

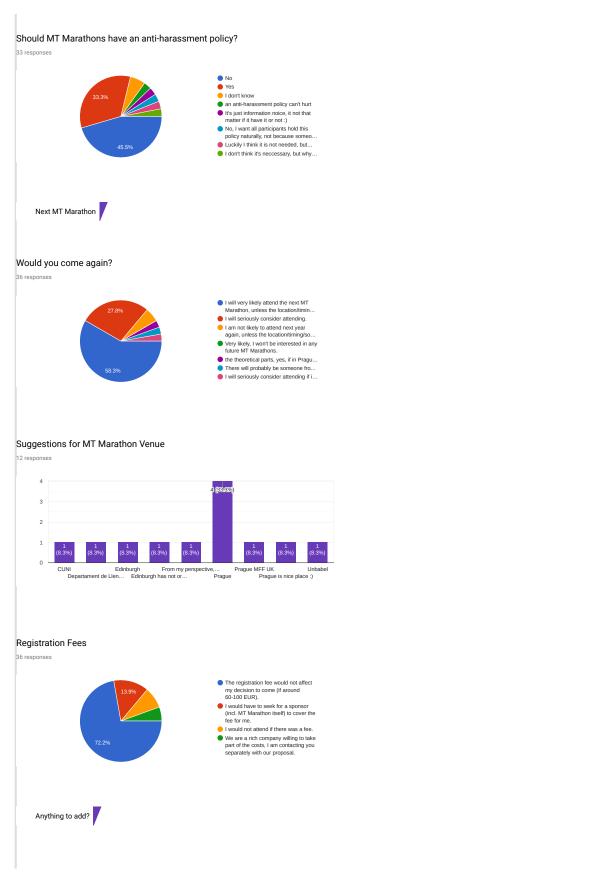
contact the coordinators of the projects at least once. Something simple like sending a generic mail to them can (and will) make a difference

Maybe to set some date (or two) on which project should report further work (if any) perhaps after half a year and just before next Marathon. Inform participants one month or two weeks bfore this date that they should prepare something for their projects, and after this date, send summary which projects have reported something. This may lead to continuing of some projects on the next Marathon, or gaining more people/effort for the projects.



Yes! I didn't notice any big advertising of MTM, I worry that lots of people didn't know about it, or knew the date too late and couldn't attend.

Also, my colleagues didn't know whether there is still free space on MTM, weeks after registration was open. It could be useful to specify an actual updated number of free slots to encourage people to register. The information was sufficient, and delivered in time All was good Sufficient. Just enough and not too much! Thanks for taking care everything was ok The information was sufficient for me. Social aspect 18 responses I found the social events really fun, great job! They were great! Only attended the event in Letná, but it was a very nice event for networking. The social events were very successful. The only advice I would have is to take a little care of people with dietary requirements, like vegetarians and vegans. Most catering companies can offer such meals if I attended both events and I had a great time on both of them. Loved them all! Hope there are more to come Of course! It is good to have oportunities for networking and socialising in a more relaxed (without coffee/with a pint of beer) atmosphere. All was good Thanks Memsource great, keep! I think the first social event was not crucial, we could socialize in the same way during the coffee breaks. I would also prefer unlimited coffee during the conference rather than the served dinner there. perfectly happy with the social part! I did not attend, I coded instead. Both were great. They had just one downside - there was less time for coding ;-) I think it is great to have at least one such social event. I only attended the one in Letna and I liked it a lot. Anti-Harassment Policy Did you notice anything that might be construed as harassment? No Yes
The smell of busses going past the open windows while having the lectures and projects on the same e...
There were times I felt uncomfortable as the only woman in the project rooms because the way most people. What? Is this a compulsory question? I did not.



Anything you want to add? Any other comments?

11 responses

i) More advertisement to attract more participants. ii) City Sight seeing can be added on last day.

The chocolate doughnuts at the coffee breaks were amazing

Good job!

Thank you! It was really nice event :)

Compared to last year, this MTM was much better:
- the venue was much more convenient (4 nice big rooms next to each other, very good equipment, not too hot, comfortable spacious lecture hall with desks and sockets, ...)
- I consider this year lectures, labs and speakers as more interesting than last year

One thing, that last year was better, was a Slack space for everyone at the marathon. Wiki and SVN doesn't work so well.

Thanks, for organising the MT Marathon! It was a pleasure meeting all of you in Prague!

Did not attend in person, but was happy to present my talk online :)

Sometimes it was hard to understand the lecturers at the back of the class. Would be great to support some of them by amplifying their voices via loudspeakers (they had microphones anyway, so this should be easy?).

Thanks! It was a nice experience for me.

For me personally/our company reasonable registration fee would not be a problem, but it may reduce number of attendees (students) and thus count of people working on projects. So sponsoring is probably better way. I'll ask in our company and let you know in case of success.