

HACKAQUANTUM: Second Quantum Computing School Hackathon

1. RULES

These rules govern the Hackathon of the Second Quantum Computing School, held between October 7 and October 18, 2024. The rules to be followed by participants and the details of the Quantum Computing School Hackathon, hereinafter referred to as “Hackaquantum” or “event,” are established here. Every participant in this hackathon declares themselves aware of and in agreement with the stipulations in these rules.

2. Objective

The event aims to present problems that are relevant in the academic context. With the proposed problems, we intend for participants of the Second Quantum Computing School to apply the knowledge acquired in the lectures. Overall, we hope that practical application, together with the knowledge acquired in the school, will contribute to the educational formation of professionals in the field of quantum computing.

3. Date and Venue

Hackaquantum is one of the events that make up the Second Quantum Computing School. It will be held between October 7, 2024, and October 18, 2024, according to the following schedule:

Date / Time (Brasília Time)	Activity	Description
07/10/2024 - from 14:00 to 15:45	Hackaquantum presentation;	Presentation of the Hackaquantum format and main information.
09/10/2024 - 18:00	Deadline for group presentation;	Definition of the group's name and participants for the organization.
18/10/2024 - 18:00	Solution submission;	Deadline for submitting the proposed solutions by the groups.
21/10/2024 - 12:00	Award ceremony.	Announcement of the winners and their respective prizes (via email).

Any face-to-face activity will take place at the same venue as the Second Quantum Computing School (ICTP-SAIJR, São Paulo, Brazil).

Registration

Any participant of the Second Quantum Computing School can participate in the event by being part of a group and submitting a solution for at least one of the proposed problems within the stipulated deadline.

Team Formation

The problems must be solved in teams of 4 to 5 people. Teams must be named by the participants themselves. The following information must be sent to the organization by the date stipulated in section 2:

- Team name;
- Name of each team member;
- Email of each team member.

Proposed Problems

The proposed problems will be divided into “exercises” and “challenges.”

- Each exercise will be worth 5 points.
- There will be 1 challenge per lecture worth 10 points.
- Professors will create all the challenges related to the lectures.
- Extra challenges and exercises may be created by the organization if necessary.

Evaluation

To classify the groups that will be awarded, the criteria below will be applied for each exercise or challenge.

Exercises:

- Correct solution: 5 points;
- Partial solution: 3 points;
- Incorrect solution: 0 points.

Challenges:

- Correct solution: 10 points;
 - Partial solution: 5 points;
 - Incorrect solution: 0 points:
- Executable code (eliminary).
 - Commented code and/or solution explanation. Three qualitative ratings will be assigned in this criterion: good, regular, or absent.
 - Solution quality. Three qualitative ratings will be assigned in this criterion: good, regular, or absent.

- Solution creativity. Three qualitative ratings will be assigned in this criterion: good, regular, or absent.

If the code is not executable or the solution is incorrect, it will be classified as an “incorrect solution.”

If the challenge solution is classified as “good” in most criteria, the group will receive the maximum score for this challenge (“correct solution”).

In intermediate cases, the classification “partial solution” will be assigned to the challenge.

Awarding

There will be awards for the best groups.

At least 3 groups with the highest total score (exercises and challenges) will be awarded.

In cases of similar scores, the prize will be equally divided among the groups with the same score.

To be awarded, the group must solve at least one challenge.

Any situation not covered in these rules will be discussed by the organization.

The winning teams will be announced on 10/21/2024, as established in the schedule.

Prize delivery will occur from this date.

The means of prize delivery should be discussed between the winners and the organization.

It is the participant's responsibility to establish a viable means for the organization to deliver the prize.

Rules

To facilitate the evaluation of the solutions, the following rules must be followed:

- Each person must participate in only one group;
- Once the deadline for defining groups has passed (as per the schedule in section 2), no new members will be allowed.
- For exercises and challenges that require programming codes, they must be submitted as the solution or part of the solution to the organization;
- All necessary pips must be included at the beginning of the code;
- The developed code must be commented on clearly and concisely in English;
- Solution submission must be made only through the GitHub provided by the organization.

Failure to comply with the rules is subject to disqualification.

Intellectual Property

The intellectual property remains with the authors of the solution.

Upon submission of the proposed solution, participants grant the Quantum Computing School a license to use, reproduce, distribute, publicly display, publicly perform, and create derivative works of the solutions for educational, promotional, and research purposes.

The Quantum Computing School commits to giving due credit to the authors of the solutions in any public use of them.

Sharing and Disclosure

Participants agree that the developed solutions may be published on the official Quantum Computing School website and other related platforms, aiming to promote innovation and collaboration in the field of quantum computing. Additionally, the solutions may be presented and demonstrated at future events of the Quantum Computing School or by partners.

Confidentiality

Participants must ensure that their solutions do not contain confidential information or third-party trade secrets. The Quantum Computing School is not responsible for protecting confidential information contained in the submitted solutions. Participants are responsible for ensuring that information they wish to keep confidential is not included in public submissions.

Available Resources

No electronic equipment will be provided to the event participants.

Communication

Official communication will be carried out through the Discord platform.

Closing

The event will close on 10/21/2024 with the awarding of the best-presented solutions.

Final Provisions

Any situation not covered in these rules will be evaluated by the Hackaquantum organizers. The organization reserves the right to change the program or cancel the event at any time, upon notification to the participants.