Call for Problems

IEEEXtreme 14.0 seeks original and inspirational ideas for programming challenges. If you are interested in contributing a problem to IEEEXtreme 14.0, please read below for how to proceed. This Call for Problems is open to anyone, except the competitors who will compete in IEEEXtreme 14.0.

Candidate problems should be emailed to the IEEEXtreme 14.0 technical lead, Bowen Yu, at ieeextreme.problems@gmail.com. The following are required to submit a candidate problem:
- A description of the problem's task.
  - The task should be unambiguously specified.
  - The task must require a contestant's program to read input and produce output.
  - Specify the size of the input, e.g. how many tokens are in the input. Provide the value ranges of all the input tokens, e.g. what value range an input integer has.
  - The task description should generally require at most one Letter/A4 page.
- A description of the expected solution (i.e. how you would write a program to solve the task).
  - A solving program must not take an excessively long time, and should typically finish within 10 seconds on any valid input data.
  - A solving program should not require a huge amount of code. Contestants must write solutions in a relatively short amount of time, which is typically no more than one hour, and at most 6 hours. A few hundred lines of code should be an upper limit of the size of a solving program.

The format of both descriptions can be in text in email, text file, Word document, or tex/latex source compilable directly on overleaf.

Here is a sample of what needs to be included in a problem idea submission.

The following will make the candidate problem significantly more solid and increase its chance of being used in the competition:
- A solving program to the proposed problem.
- Time/space complexity analysis of the expected solution.
- Test data.

Please note that these are optional, and you do not need to submit fully developed problems. We welcome all contributions from problem ideas to fully-tested problems.

All candidate problems must be submitted by no later than **10 May, 2020**.

Judging Team

If you contribute a problem idea that is selected as a challenge for IEEEXtreme 14.0, you will automatically be considered a member of the judging team and will be responsible to fully develop the problem. The development of a problem includes:

- Complete the formal task description
- Write a solving program
- Generate test input data and their expected output
- Make sure that the test data are consistent with the task description and does not contain errors

Please note that if you submit a candidate problem to us, we would require you to adhere to strict confidentiality related to all communication between us about this problem.