ACM International Collegiate Programming Contest 2018

Marko Schütz-Schmuck

Department of Mathematical Sciences University of Puerto Rico at Mayagüez Mayagüez, PR

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What is the ACM-ICPC?

- multi-tier programming competition
 - on-site, team-based, typically 4-5 hours to solve up to (about) 8-10 problems
- held for last 40+ years
- open to university students at all levels (see requirements)
- last world finals
 - 140 total teams
 - 4 teams from Caribbean
 - 3 from Cuba
 - 1 from Dominican Republic

This years cycle

- local competitions (22/Sept)
 - students from each campus compete among each other
 - held on the same day throughout the entire Caribbean
- national competitions (6/Oct)
 - best teams from Puerto Rico campuses qualify to compete in nationals
 - this year's PR nationals: at UPRM
 - held on the same day throughout the entire Caribbean
- regional competitions (10/Nov)
 - best teams at nationals advance to regionals
 - this year: UCNE, San Francisco de Macorís, DR
- world finals (April 2019)
 - best teams at regionals advance to world finals
 - early next year: Portugal
 - no team from PR has made it to the finals, yet...

Requirements¹

- did not start university before 2014
- born 1995 or later
- completed at most 8 semesters full-time STEM studies
- additional details: icpc.baylor.edu → rules
- teams consist of exactly 3 members
- every team must have a coach
 - coach can be anyone, not necessarily a student
 - same coach can coach several teams

Registration

- https://icpc.baylor.edu/register
- contestants can register
- coach has to register team made up of 3 contestants
- start registration early: need some information, you might not have at hand (e.g. passport no)
- registration open 3/Sept 18/Sept
- no late registration possible!

Benefits

- important point on CV that software development companies will recognize
- increasingly employers use programming competitions in candidate assessment
 - prior experience helps
- extra credit?
 - if you are taking some programming course the professor might give extra credit for competing: ask

How do I prepare?

- practice, practice, practice, and then repeat!
- http://coj.uci.cu has tons of practice problems with automated acceptance testing
- complete n00bs (just started programming): know basic syntax, using tool-chain
- beginners: know library data structures/algorithms
- intermediate and above: practice as much of dynamic programming, graph algorithms, number theory, geometry, as possible
- team collaboration
 - find out how your team can best collaborate
 - maybe one is best at spotting easy problems, one might be best coming up with initial algorithmic idea, one might be best at typing source code...