

ICPC

What is it and how do I participate?



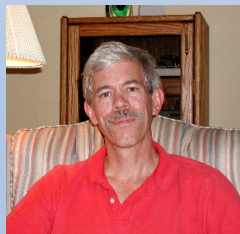
Coaching Staff



- Dennis Matveyev (Alumnus)



- Shang-En Huang (Ph.D. grad student)



- Kevin Compton (Professor Emeritus)

International Collegiate Programming Contest

- Sponsored by Association for Computing Machinery (largest computer science professional organization)
- Programming contest for undergrads and first-year grad students
- International – Universities from every continent except Antarctica participate

Three Stages

- Regional Contest – East Central North America (ECNA) Region: Lower Michigan, Ohio, Indiana, Pennsylvania and Ontario
- North American Contest (NAC) -- first held 2020. Top teams from North American Regionals (including UM)
- World Finals – UM qualified for Prague 2004, Shanghai 2005, Harbin (China) 2010, Orlando 2011 (gold medal), Ekaterinburg (Russia) 2014, Marrakech (Morocco) 2015, Rapid City (South Dakota) 2017, Beijing 2018

Contest Format

- 3 students per team using one computer, 5 hours
- At the Regional: multiple teams from a university
At NAC and World finals: at most one team per university
- 10 to 12 problems. Team working most problems wins.
Tie breaker: least time (with wrong submission penalty)
- C++ (with STL), Java, Python

Regional Contest



- Usually late Oct or early Nov. Covid delay: Winter sem.
- Usually travel and overnight. Probably not this time.
- Usually 5 teams from UM.
- Much still unknown this year.

A Typical (Easy) Problem

- See the PDF

What We Will Do This Semester?

- Practice, practice, practice.
- Practice contests, first solo. At some point we will have team tryouts and then practice as teams.
- Tutorials on problem solving and tricks of the trade (from the master, Shang-En).
- Possible other materials from ICPC Foundation and Jet Brains

What You Need to Do

- Let us know (at any time) if you want us to take your name off our email list
- Otherwise, you will receive instructions within the next day or so on how to use Code Forces (for the first two contests), then Kattis (the official contest system) for the others
- There will be an online practice contest at 6 pm Friday (Oct 2). Simple problems – this is to get used to the system and the compiler version used.

• This is a work in progress. More announcements later.

THANKS FOR ATTENDING!

- Questions?