Algorithms for Programming Contests - Preliminary Meeting

Prof. Dr. Javier Esparza
Tobias Meggendorfer, Philipp Meyer, Christian Müller,
Gregor Schwarz
conpra@in.tum.de

27. Juni 2018

Topics

- 1 Introduction
- Data Structures I
- 3 Graphs, Minimum Spanning Trees, DFS, BFS
- 4 Shortest Paths
- 6 Flows
- 6 Brute Force / Backtracking
- Greedy
- 8 Dynamic Programming
- Number Theory
- Data Structures II
- Geometry
- Projective Geometry
- Contest
- Conclusion

Typical Week

Anywhere

Five programming exercises

At university

- Discuss last weeks exercises
- Discuss possible solution strategies
- Learn about new topic/algorithms
- Go home and implement them
- Discuss with other students

Check it out

- Open practice contests (judge.in.tum.de/contest/)
- News on the website/Facebook (icpc.in.tum.de)

Next steps

- Sign attendance sheet
- Make sure you have an account at the "Rechnerhalle"
- Include this course in your matching preferences