

Welcome to CSE 417

Algorithms and Computational Complexity

Administrivia

- **Anna Karlin**
 - CSE 594, karlin@cs
 - Office hours, Thursday 9-10am and by appt.
 - TAs
 - Wenbo Cui** Office hour Wednesday, 4-5pm
 - Ziyao Huang** Office hour Thurs 5:45-6:30pm
 - Seokmin Kim** Office Hour Friday 1-2pm
 - Kuikui Liu** Office hour Monday 4-5pm
 - Jingyi Yuan** Office hour Tuesday 4-5pm
- All TA office hours in CSE 218.
 - Office hours start next week.

What is this course about? (1)

- **Design of algorithms**
 - Design techniques
 - Common and important types of problems
 - Analysis of algorithms: efficiency
 - Correctness proofs
- **Goal: expose you to a sampling of ideas, techniques, tools and applications.**

What is this course about? (2)

- **Complexity, NP-completeness and intractability**
 - Solving problems in principle is not enough
 - Algorithms must be *efficient*
 - Some problems have no efficient solution
 - NP-complete problems
 - Important and useful class of problems whose solutions (seemingly) cannot be found efficiently, but can be checked easily.

Other

Course web page:

- <http://courses.cs.washington.edu/cse417>
- Office hours listed

Background expected

- Intro algorithms and data structures (e.g., CSE 373)
- “Mathematical maturity”

Workload

- 7-8 problem sets (55%)
 - Half paper and pencil, half programming.
 - Due Fridays: 4pm or midnight?
 - Participation (5%)
 - Final (40%)
- I might replace one or two problem sets with a quiz.... to be determined...