

Music 128 | CS 170

Stanford Laptop Orchestra

Spring Quarter

Instructor: Ge Wang (<http://ccrma.stanford.edu/~ge/>)

class time: W 7-10pm

location: CCRMA Stage (Knoll)

prerequisite: basic programming experience; instructor consent

Description:

This course explores composing, coding, and performance with laptop orchestra. This is the full classroom & ensemble instantiation of the Stanford Laptop Orchestra (SLOrk). Topics and activities include issues and aesthetics of instrument design and composing for laptop orchestras, sound synthesis, programming, and live performance. Coursework includes designing laptop-mediated software musical instruments, crafting musical works, and live performance as part of the laptop orchestra. This course serves as a one-of-a-kind learning environment that explores music, computer science, interaction design, composition, and live performance in a uniquely interdisciplinary adventure.

Topics include:

- computer-mediated instrument design
- physical interaction design
- sound design
- programming
- composition
- live performance
- aesthetics of computer music performance

Logistics:

- One 3-hour lecture/rehearsal per week
- Two concert performances:
 - SLOrkastic Chamber Music (midterm)
 - SLOrk Spring Concert (final)
- additional rehearsals for both concerts
- optional tutorials / hack sessions (as needed)

Grading:

- 50% creative project work (one individual, two group)
- 50% full participation and performance with ensemble

Stanford Laptop Orchestra:

<http://slork.stanford.edu/>