Final Projects Discussion
CS289

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Final Projects

- **Key purpose**
  - Explore an interest/idea in more depth
  - How to convert an *interest* into a "doable" short project
  - Read the GUIDELINES on the website
  - Projects should be done in pairs (but solos and 3s are ok)

- **Picking a Topic**
  - Theory, Algorithms, Models, Applications, etc.
  - In all cases, this is "practice" for conducting real research
    - Part of the exercise is to formulate reasonable size projects for yourself: you propose what you will do, what you will deliver, how you will evaluate it.
    - The project must involve some sort of "implementation" (not purely conceptual, not surveys)
    - The project must have a clear relationship to topics in this class (e.g. can extend the results of a paper we read)

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Logistics/Dates

- **Project Proposal/Slide due Wed Nov 3, 10am sharp**
  - Oct 15 (Today): Find partners and define projects
  - Oct 26 (Tues): Have a ½ hour zoom meeting to discuss your project idea with me (link will be sent on piazza)
  - Nov 3 (Wed): Proposal/1-Slide due by 10am. In class each team will give a 2 minute 1-slide description of their project.
  - Dec 1 and Dec 3: Project presentations (mandatory attendance)
  - Dec 10: Final paper is due by 5pm

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Proposal

- **Writing a Proposal (due Nov 3)**
  - Submit a ~5 page proposal on your class project
  - Submissions should be in **PDF** (see guidelines, examples)
  - Also 1 Slide description (new this year)
- **Your proposal should contain**
  - Your and your partner's names
  - A 1 page description of the problem and its significance
  - A description of background and related work
  - A plan of execution, along with a list of weekly milestones
  - A short bibliography
- **Couple of things to think about**
  - Feel free to set milestones that come with the caveat "if all goes well up to this point, then …"
  - Make sure that you build in evaluation points into your milestones, how will you evaluate intermediate steps?

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Examples: Models of Biology






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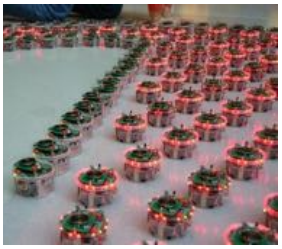
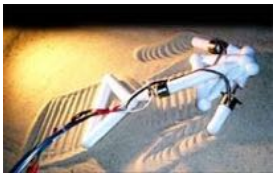
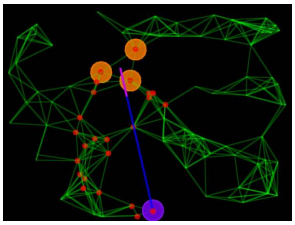
Examples: Algorithms and Applications

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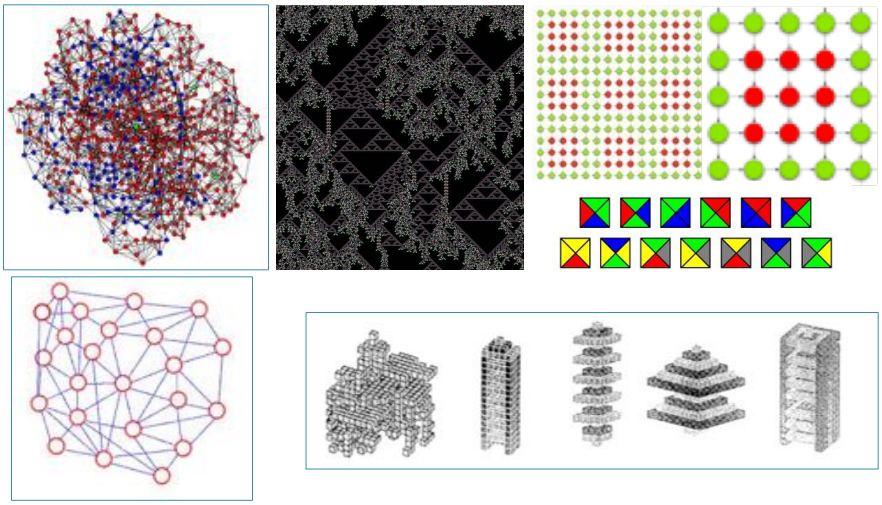
Examples: Theory



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Self-Organization!

- **Re-Introduce Yourself**
  - Start with people looking for partners/projects
  - Name, Grad/Undergrad, Research area
  - General area you'd like to do a final project in
    - Or one sentence description if you already have a project in mind.
- Self-organize groups
  - Talk to people with like-minded interests
  - Can also come chat with me about your project idea.

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