

Invitation to COMPSCI 389

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A continuation of COMPSCI 289.

An overview of research methods and techniques used across the discipline of Computer Science, including formal proof techniques and empirical methods that involve quantitative and/or qualitative data.

Students will be expected to apply the research methods in a collaborative research project.

is fun and exciting when you come up with good ideas, when experiments/proofs work, when you get some nice results, when you have time to think at your own pace . . .

But . . . much of the time in research is dedicated to other things *you need to do*: writing grants, debugging code, trying to figure out what went wrong in the last experiment or proof, coping with low productivity (90% of theoretical work goes to rubbish bin) . . .

All of this with chronic lack of time.

Assessment

1. Research Proposal 15%
2. Peer Review of Research Proposals 15%
3. Test 20%
4. Research Final Report 20%
5. Report on collaborative process 10%
6. Research Presentation 10%
7. Research Poster 10%

Train in, Be curious, Collaborate

Students will be involved in choosing or modifying

- ▶ the research methods to be presented
- ▶ areas and projects to work on
- ▶ collaborators
- ▶ distribution of tasks in teams
- ▶ extra topics, like
 1. how to choose a problem
 2. how to write a research paper
 3. how to generate ideas
 4. how to give a good talk
 5. how to do a project management
 6. truth and “fake news”
 7. how to cope with failure
 8. cheating and other ethical issues
- ▶ even . . . parts of assessment

Join and have fun!