Systems Section

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DWA what this means. Goal is to write cool new programs.

Hello

- Name
- Intro to neighbors

Today

- Expectations x2
- Logistics (GitHub)
- Crash course on SMT and SAT
- Overview of projects
- Intro the starter paper

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- Feel frustrated --- it's supposed to be hard!

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- "Idea search pruning"

Logistics

- Everyone needs to be on GitHub
 - (If issue, contact me)
- Everyone needs to be added to section repo

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- (Broad brushes)

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Try it: https://jfmc.github.io/z3-play/

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- Uglier input; "Conjunctive Normal Form"

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- Can always turn a formula into CNF

(A || B) && (A || !C)

(A | B) && (A | !C)

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"Clauses"

(A || B) && (A || !C)

(A || B) && (A || !C)

(A | B) && (A | !C)

"Variable," "Constant"

(A || B) && (A || !C)

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"Literal"

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SAT Solvers: CNF Writing

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Try it!

https://www.comp.nus.edu.sg/~gregory/sat/

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Project 1: Proof Explorer

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Good if: you like parsing/program analysis/language design/etc.

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Good if: you like reading other people's code, or you like empirical evaluation work

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- This is BCP

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