Synthesis Competition Tools

Motivation
This year we introduced SYNTCOMP – the competition of automatic program synthesis tools. The tools compete for synthesis time and for circuit size. The competition is new and the field is not explored:
- Is there the best approach to the synthesis?
- Can we ruin other tools with specially crafted benchmarks?
- Can SAT/SMT solvers be used efficiently?
- Can we efficiently parallelize the synthesizers?

Project Description
Goals
• On top of an existing tool explore synthesis ideas
• Understand the field of the synthesis: tools strong and weak sides

Background
Helpful but not required:
• “Logic and Computability”
• “Selected Topics in Design and Verification” (or attend this Summer)
• C, Python, Linux

Deliverables
• Synthesis tool
• Ideally, research paper (we will write it together)

Scope and Credits
Studies: INF SEW TEL MATH
The scope, effort, and credits of this project are scalable

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www.syntcomp.org
https://bitbucket.org/art_haali/aisy-classroom