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EE6094 CAD for VLSI Design
Final Project Check Point I (Due: 23:59:59, 2023/03/30)

Introduction

The final project of this course is attending 2023 CAD Contest and complete one of the problems in the contest. You are asked to form a group of four students. All the problems in the contest come from EDA industry and are not easy to solve. Therefore, we set up several check points to support you for successfully completing the final project. You need to submit required slides/videos/reports/… for each check point. You also need to register for the contest and complete alpha submission. The final project score will base on the grading of each check point.

The 2023 CAD Contest are in two parts: International Contest and Domestic Contest. Based on the contest requirement, only 1st year graduate students and undergraduate students can participate Domestic Contest. Moreover, each team in Domestic Contest MUST include at least one undergraduate student. For more details, please refer contest website:

International contest:	http://iccad-contest.org/
Domestic contest:	http://iccad-contest.org/tw/

The schedule of each check point is shown below:

Check Point I:	2023/03/30 Problem reading and decision
Check Point II:	2023/04/27 Basic algorithm proposal
Check Point III:	2023/06/15 Final Project Due
Check Point IV (Alpha Submission):	2023/06/19 Submit alpha version

Background

The CAD Contest at ICCAD is a challenging, multi-month, research and development competition, focusing on advanced, real-world problems in the field of Electronic Design Automation (EDA). It is open to multi-person teams world-wide. Each year the organizing committee announce three challenging problems in different topic areas provided by industrial companies. Contestants can participate in one or more problems. The prizes will be awarded at an ICCAD special session dedicated to this contest.

Since its inaugural year of 2012, the CAD Contest at ICCAD has been attracting more than a hundred teams per year, fostering productive industry-academia collaborations, and leading to hundreds of publications in top-tier conferences and journals. The contest undoubtedly boosts EDA research and keeps enhancing its impact.

Requirements of Check Point I

The purpose of check point I is helping you selecting a suitable problem from the contest. Before the selection, you need to carefully read all problem documents and evaluate whether you have sufficient programming background for working on the problem. The related EDA knowledge will be covered in this course. After reading the documents, each team is requested to pick up one problem as your target.

In this check point, each team are asked to prepare slides and record a video to explain the problem you will work on. The video should be less than **15 minutes**, and you need to explain the problem as clear as you can. You need to prepare slides for your video. Your slides should at least include: (1) Problem title and team member information, (2) Background (why this problem is important in the EDA filed), (3) Problem formulation (Given …, Find …, Subject to …, Constraints …), (4) Evaluation rules, and (5) An example to explain the input/output formats. All other related contains are welcome.

Upload your video (in .mp4 format) and slides (in .pptx format) to ee-class. Name your file as *teamID_leaderstudID*_Final_Report_I.mp4 and *teamID_leaderstudID*_Final_Report_I.pptx. Note that the maximum allowed size for uploaded files is 500MB for ee-class, and you have to make sure that your file will not exceed the limit.

Grading

Your assignment will be ranked and scored according to (1) the structure and content of your slides, (2) the clarity of your explanation, and (3) the smoothness of the recording video.

Contact

For all questions about Final Project, please send E-mail to TA 劉致瑋 (luke871228@gmail.com)