

CSCE 990 Advanced Constraint Processing, Fall 2009

Homework 1

Assigned November 19th, 2009

Due: December 1st, 2009

Consider the paper on Covering Arrays by Hnich et al. and presented by Pingyu in class. Specify each of the constraint models proposed by the authors for a general covering array problem stated as $CA(t,k,g)$ with b testing vectors. This homework is worth 5 points of the total final grade.

Justify each answer as clearly as possible. No proofs are requested: just clear explanations.

	For each constraint Model			
	Naïve	Alternative	Integrated	SAT
1. What are the variables?				
2. What is the number of variables?				
3. What are the domains?				
4. What is the domain size?				
5. List all the constraints: names & definitions				
6. What is the number of constraints?				