

Advanced Model Checking Summer term 2009

– Series 6 –

Hand in on June 1'st before the exercise class.

Exercise 1

(4 points)

Compute the ample sets for at least four successive states in $\hat{TS} = TS(PG_1 \parallel PG_2)$ by means of Algorithm 41 (page 634 in the book).

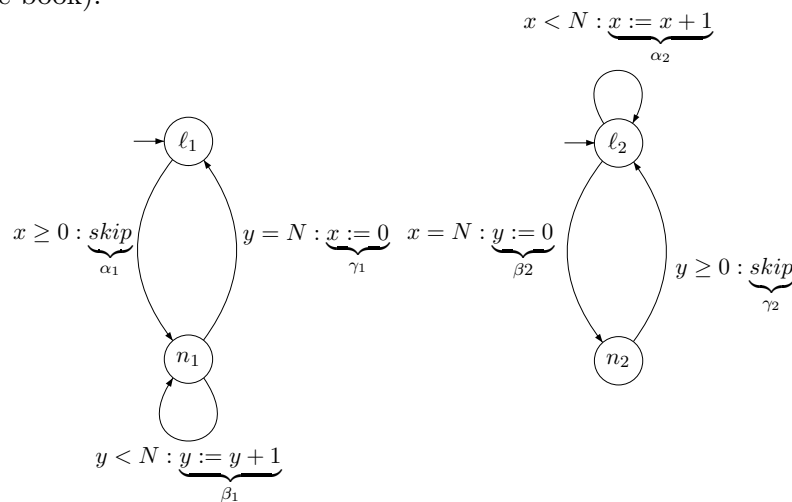


Abbildung 1: Program graphs PG_1 (left) and PG_2 (right)

Exercise 2

(3 + 3 points)

Consider the following transition systems.

- (i). Give the switching function of Train, Controller and Gate respectively.
- (ii). Give the switching function of the parallel composition of Train, Controller and Gate.

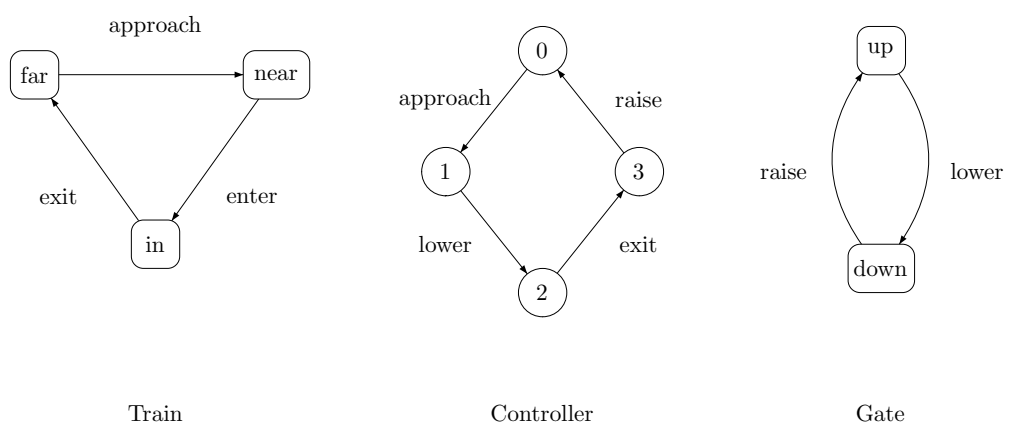


Abbildung 2: Componentes of a railroad crossing.