## 1 Segment Match Refinement: Nice example

Produce a minimal resolved refinement for the following set of segment matches.

$$
\mathcal{M}=\left\{M^{1}=\left(1_{1,4}, 2_{1,4}\right), M^{2}=\left(1_{2,5}, 2_{4,7}\right), M^{3}=\left(2_{5,8}, 3_{5,8}\right)\right\}
$$



## 2 Segment Match Refinement: Does it really work?

Think about why the algorithm works. Does it really resolve every overlapping? Is the produced refinement really minimal? A formal proof is not necessary, but try to find a clear reasoning.

## 3 Segment Match Refinement: Not so nice example

Look at the following example. Do a few steps of the algorithm and observe what happens. What does this mean for the output? The arrows denote the projections for the different segment matches.

$$
\mathcal{M}=\left\{M^{1}=\left(A_{1,5}, B_{1,5}\right), M^{2}=\left(A_{7,11}, B_{7,11}\right), M^{3}=\left(A_{1,5}, B_{8,11}\right), M^{4}=\left(A_{7,11}, B_{1,5}\right)\right\}
$$



